

**VILLAGE OF PEMBERTON
-REGULAR COUNCIL MEETING AGENDA-**

Agenda for the **Regular Meeting** of Council of the Village of Pemberton to be held Tuesday, April 19th, 2016, at 9:00 a.m. in **Council Chambers, 7400 Prospect Street**. This is Meeting No. 1425.

"This meeting is being recorded on audio tape for minute-taking purposes as authorized by the Village of Pemberton Audio recording of Meetings Policy dated September 14, 2010."

Item of Business	Page No.
1. CALL TO ORDER	
2. APPROVAL OF AGENDA	
Recommendation: THAT the Agenda be approved as presented.	
3. RISE WITH REPORT FROM IN CAMERA (CLOSED)	
4. ADOPTION OF MINUTES	
a) Regular Council Meeting No. 1422 – Tuesday, March 15th, 2016	5
Recommendation: THAT the minutes of Regular Council Meeting No. 1422 held Tuesday, March 15, 2016, be adopted as circulated.	
b) Special Council Meeting No. 1423 – Tuesday, April 5th, 2016	29
Recommendation: THAT the minutes of the Special Council Meeting No. 1423, held Tuesday, April 5 th , 2016 be adopted as circulated.	
c) Special Council Meeting No. 1424 – Tuesday, April 6th, 2016	30
Recommendation: THAT the minutes of the Special Council Meeting No. 1424, held Tuesday, April 6 th , 2016 be adopted as circulated.	
5. BUSINESS ARISING FROM COMMITTEE OF THE WHOLE	
a) Tax & Utility Single Billing	
Recommendation from the Committee of the Whole: THAT Utility Billing be added to the Village of Pemberton Tax Bill to establish single billing for both taxes and utilities;	
AND THAT single billing be implemented in 2017;	
AND THAT notice of this change in billing procedure be issued in the 2016 tax notices and over 2016 to ensure all property owners are aware of the change procedure.	
6. COMMITTEE MINUTES - FOR INFORMATION	
There are no Committee Minutes for presentation.	
7. DELEGATIONS	
a) Oliver Robson, Project Manager and Liz Scroggins, Project Coordinator/Community Liaison, Innergex Upper Lillooet Hydro Project - Update	33

8. REPORTS

a) Office of the CAO

- i. **Airport Infrastructure Funding - British Columbia Air Access Program (BCAAP)** 34

Recommendation: THAT the Airport Infrastructure Grant application and the activities proposed therein be supported;

AND THAT Council approves the 25% matching component up to \$25,000.

- ii. **BC Bike Program, Friendship Trail Bridge Application** 39

Recommendation: THAT Council supports the application of the BikeBC for grant funding, in the amount of \$430,190, to increase the revenue required for the Friendship Trail/Multi-Use Bridge construction.

- iii. **Regional Agencies Communication Workshop** 41

Recommendation: THAT Council provide direction to staff on organizing a Communications workshop with the intent of developing a communications protocol between the Village of Pemberton, Vancouver Coastal Health and Sea to Sky School District No. 48.

b) Operations and Development Services

- i. **Pemberton Valley Men's Shed – Status Report** 44

Recommendation: THAT Council receives this report for information;

AND THAT Council provides direction on the proposed arrangement to lease the middle bay of the Village of Pemberton owned and maintained Storage Shed located at 7400 Prospect to the PVSS for temporary use as the Pemberton Valley Tool Library until such time as another suitable location is established.

c) Mayor

d) Councillors

9. BYLAWS

a) First, Second and Third Readings

i. Municipal Ticket Information Utilization Bylaw No. 800, 2016 65

Recommendation: THAT Municipal Ticket Information Amendment Bylaw No.800, 2016 be given first, second and third reading.

Recommendation: THAT Staff review the Bylaw Dispute Adjudication System established by the SLRD and report back to Council.

ii. 2016-2020 Five Year Financial Plan Bylaw No. 801, 2016 84

Recommendation: THAT Five Year Financial Plan Bylaw No. 801, 2016 be given first, second and third reading.

iii. Annual Tax Rates Bylaw No. 802, 2016 91

Recommendation: THAT Annual Tax Rates Bylaw No. 802, 2016 be given first, second and third reading.

iv. Water Frontage Tax Amendment Bylaw No. 803, 2016 93

Recommendation: THAT Water Frontage Tax Amendment No. 803, 2016 be given first, second and third reading.

v. Sewer Frontage Tax Amendment Bylaw No. 804, 2016 94

Recommendation: THAT Sewer Frontage Tax Amendment Bylaw No. 804, 2016 be given first, second and third reading.

10. CORRESPONDENCE

a) For Action

i. Correspondence from Deryk Lee, President, Public Works Association of British Columbia, dated March 22nd 2016, requesting that the Village declare May 15th – 21st 2016, ‘Public Works Week’. 95

Recommendation: THAT the Village consider declaring May 15th – 21st 2016, ‘Public Works Week’ in the Village of Pemberton (see proclamation attached).

ii. Correspondence from Phill Read, Pemberton Secondary School, Red Devils Association, dated March 22nd 2016, requesting donations to support the High School Sports Programs and Competitions. 97

Recommendation: THAT the Council provide direction with respect to a contribution to the fundraising event.

iii. Correspondence from Jack Crompton, Chair of Squamish-Lillooet Regional District dated March 31st 2016, requesting a letter of support for the SLRD Solid Waste and Resource Management Plan to the Ministry of Environment. 98

Recommendation: THAT Council send a letter of support to the Ministry of Environment for the SLRD Solid Waste and Water Resource Management Plan.

- iv. **Correspondence from the Honourable Peter Fassbender, Minister of Community, Sport and Cultural Development, dated April 8th 2016, regarding consultation underway on issues surrounding the sharing economy with new competition from transportation and accommodation companies such as Airbnb, Uber and Lyft.** 246
- v. **Recommendation: THAT** correspondence be sent to The Honourable Peter Fassbender, Minister of Community, Sport and Cultural Development, advising that the Village is eager to participate in discussions related to the sharing economy and outlining the challenges and impacts the Village is currently facing as a result of the proliferation of Airbnb properties.

AND THAT a copy of the staff Report to Council titled “Short Term Vacation Rentals Update”, dated February 2nd, 2016, be included as an attachment.

b) For Information

- i. **Correspondence from Peter Ronald, Programs Officer, UBCM thanking Mayor and Council for submitting an application for the Community Wildlife Protection Plan Update for the Strategic Wildfire Prevention Initiative.** 248
- ii. **Copy of correspondence from Janet and Hugh Naylor to Pamela Goldsmith M.P. Re: Canada National Railway Crossings within the SLRD.** 250
- iii. **Correspondence from Mayor Nancy Wilhelm-Morden, Chair, Transportation Advisory Group, dated March 17th 2016, providing an update on the activities of the Transportation Advisory Group (TAG).** 260
- iv. **Correspondence from Dr. Paul Martiquet, Medical Health Officer, Vancouver Coastal Health, providing updates and information as a follow up to the Drinking Water Town Hall Meeting held April 5th 2016.** 325

Recommendation: THAT the above correspondence be received for information.

11. DECISION ON LATE BUSINESS

12. LATE BUSINESS

13. NOTICE OF MOTION

14. QUESTION PERIOD

15. IN CAMERA

Recommendation: THAT pursuant to Section 90 (1) (e) acquisition, disposition or expropriation of land and (k) negotiations of the Community Charter, the Council of the Village of Pemberton serve notice to hold an In-Camera Meeting on today’s date for the purpose of dealing with matters for which the public shall be excluded from attending.

16. ADJOURNMENT

**VILLAGE OF PEMBERTON
-REGULAR COUNCIL MEETING MINUTES-**

Minutes of the Regular Meeting of Council of the Village of Pemberton held on Tuesday, March 15, 2016 at 9:00 a.m. in Council Chambers, 7400 Prospect Street. This is Meeting No. 1422.

IN ATTENDANCE: Mayor Mike Richman
Councillor Jennie Helmer
Councillor James Linklater
Councillor Karen Ross

ABSENT: Councillor Ted Craddock

STAFF IN ATTENDANCE: Nikki Gilmore, Chief Administrative Officer
Sheena Fraser, Manager of Corporate & Legislative Services
Tim Harris, Manager of Operations & Development Services
Robert Grossman, Fire Chief
Kim Slater, Communications Coordinator (maternity leave contract)
Jill Brooksbank, Communications Coordinator
Wendy Olsson, Executive Assistant
Lisa Pedrini, Planner

ATTENDING BY PHONE: Dr. Paul Martiquet, Public Health Officer, Vancouver Coastal Health
Len Clarkson, Water Specialist and Drinking Water Officer, Vancouver Coastal Health

Public: **22**

1. CALL TO ORDER

At 9:00 a.m. Mayor Richman called the meeting to order.

2. APPROVAL OF AGENDA

Moved/Seconded

THAT the Agenda be approved as presented to include a Delegation from the BMX Society.

CARRIED

Moved/Seconded

THAT the Agenda be amended to provide an update on the Water Quality Notice and provided for an opportunity for questions from the gallery following the Delegations.

CARRIED

3. RISE WITH REPORT FROM IN CAMERA

- a) Council rose with report from In Camera meeting No. 1420, Tuesday, March 1, 2016

7462 Prospect Street – Village Owned Lot Sale:

Council approved the listing of the Village owned lot at 7462 Prospect Street and selected the Whistler Real Estate Company as the listing agent and directed staff to post notice of the intention to dispose of the above noted Village property.

4. RISE WITH REPORT FROM SPECIAL IN CAMERA

- b) Council rose with report from Special In Camera meeting No. 1421, Thursday, March 10, 2016

Water Flushing Protocols:

As a result of an update on the water conditioning project, which will address the pH levels and corrosivity of the water supply and is currently underway, initial test results indicated that in some homes there are elevated levels of lead that exceed the Maximum Acceptable Concentration (MAC). As such, Council directed staff to issue a press release and public notice on the need to implement water flushing protocols by users of the Village of Pemberton water system on the short term.

5. ADOPTION OF MINUTES

a) Regular Council Meeting No. 1420 –Tuesday, March 1, 2016

Moved/Seconded

THAT the minutes of Regular Council Meeting No. 1420 held Tuesday, March 1, 2016, be adopted as circulated.

CARRIED

b) Special Council Meeting No. 1421 – Thursday, March 10, 2016

Moved/Seconded

THAT the minutes of the Special Council Meeting No. 1421, held Thursday, March 10, 2016 be adopted as circulated.

CARRIED

6. BUSINESS ARISING FROM COMMITTEE OF THE WHOLE

There was no Business Arising for consideration.

7. COMMITTEE MINUTES – FOR INFORMATION

There were no minutes to be received.

8. DELEGATIONS

a) Inspector Neil Cross, Corporal Chris Dodds and Staff Sergeant Steve LeClair, RCMP – 2015 Annual Report

The RCMP representatives presented crime statistics for 2015 and provided an update on the Annual Performance Planning for 2015/2016 for the Lower Mainland District Regional Police Service will continue to focus on the following:

- Substance Abuse – reduce the use of drugs
- Youth Engagement – prevent and reduce youth involvement in crime as victims and offenders
- Property Crime – reducing vandalism/property crime/theft from vehicles
- Traffic Related Incidents – contribute to safer roads(impaired and distracted drivers)

It was noted that in some instances offences increased but that could be attributed to incidents that occurred during the Pemberton Music Festival which are part of the overall statistics for the area as the event falls within the Village boundaries. At the request of Council the RCMP will remove the music festival statistics from the crime statistics update so that the number better reflect what is happening within the Village. It was further noted that abandoned 911 calls continue to be a challenge on resources.

Inspector Cross advised that planning is well underway with the Pemberton Music Festival organizers and that resources will be adjusted accordingly to reflect ticket sales.

RCMP reminded residents to be vigilant and to not leave personal belongings in cars and lock your home.

b) Lower Mainland Local Government Association (LMLGA) President, Councillor Corisa Bell, Maple Ridge

Councillor Bell provided an overview of the background of the LMLGA noting that the role of the LMLGA is to act as an advocate to the Province for its 33 member municipalities. This year the LMLGA has committed to connecting with each municipality to understand their challenges in order to better facilitate open dialogue between members at the upcoming 2016 LMLGA Conference. The conference will be held in Whistler from May 11th to 13th and will present the opportunity for members to prioritize resolutions for the Association to bring forward to UBCM with an aim to increase the voice of the membership to the Province.

Topics for the upcoming conference include:

- Emergency Medical Response
- Agricultural Lands
- Medical Marijuana Grow Operations
- Technology
- Homelessness
- Tourism

Ms. Bell invited Council to share any other issues they would like to see brought forward. Council requested Community to Community relations between First Nation and non-First Nation municipalities, water infrastructure, short-term vacation rentals and climate change be brought forward for consideration as topics for discussion.

c) Graham Turner, BMX Society, Presentation on 2015 activities and plans for 2016.

Mr. Turner presented the history and background of the Pemberton BMX Society and the development of the BMX track. The track has undergone several improvements as well as maintenance since its inception in 2012 and Mr. Turner expressed thanks to volunteers, Village Staff, the Village of Pemberton Council for funding support through the Community Enhancement Fund, the Whistler Blackcomb Foundation and the Pemberton Music Festival Community Fund for support.

Events for the upcoming months are as follows: Race Night will be moved from Wednesday to Thursday; on July 1st, there is free entry for Olympic Day; the Race for Life takes place July 21st and the BMX Provincial Championships will be hosted in late September. The Provincial Championships are expected to bring approximately 750 visitors to Pemberton.

There is a fundraiser for the BMX Provincials at Mount Currie Coffee Company on March 19th at 8:00 p.m.

9. WATER QUALITY UPDATE

Mayor Richman read the following statement regarding the Water Quality Notice that was distributed by the Village on March 9th and 10th.

We want to reassure the public that the municipal water supply is safe to drink. It is tested regularly in accordance with the Guidelines for Canadian Drinking Water and meets the health regulations for lead. We have; however, discovered through a recent water condition assessment that sampled drinking water from 20 residences in Pemberton (17 in Village boundaries comprised of Village Core, the Glen, Plateau, and Airport area and 3 in Pemberton North) that there are elevated levels of lead in drinking water within some homes.

This is due to the low pH of Pemberton's water corroding pipe fittings and fixtures, which can result in lead contamination. Initial tests, which were conducted without the benefits of tap flushing, have revealed that some homes exceeded the Maximum Acceptable Concentration (MAC) of lead ranging between 2 and 6 times. Exposure levels were not uniform- they were not neighbourhood specific and they did not correlate with the age of the homes tested. Specific addresses of those homes tested cannot be released as per the Freedom of Information and Protection of Privacy Act.

More tests, including pre and post flush samples of the previous residences will be conducted and may be expanded. The results will be shared with the community once received and reviewed via pemberton.ca, Facebook and our e-News.

We have heard the communities concerns, and have been responding to inquiries via email, in addition to posting updates at pemberton.ca and on Facebook. Over 2200 notices were delivered via Canada Post to affected residents on Thursday and Friday of last week. Further, the Village will be installing neighbourhood signage, and placing ads in the Question and Pique. Concurrently, the Village is assembling a history of the well/water treatment project to share with the community.

The delivery of transparent and accurate, timely information is utmost importance to Village Council and Staff. We understand the deep concern among the community –we (including staff and Council) are community members too. It is to everyone's benefit that we work together to expediently find a solution.

The immediate corrective action to take, and the one that is recommended by Vancouver Coastal Health, is to run your tap water until it runs cold, which will flush any stagnant water that may be contaminated. Water will then be safe to drink, including to make coffee, tea or formula, and for use for cooking, and teeth brushing. Bathing and showering in water is safe so long as it isn't consumed or

the above tap flushing is carried out first. Boiling water without tap flushing first is not advisable as this may increase lead concentrations.

Please note, that the safety of our citizens is paramount. We are taking every measure to ensure that the community is and will continue to be informed with ALL the information.

We are working toward a universal solution- a pH conditioning system that will reduce the corrosiveness of the water. It is anticipated that the type of system as well as the timelines for installation will be known within the week. This information will be shared once it has been provided to and reviewed by the Village.

Mayor Richman advised that Dr. Paul Martiquet, Public Health Officer and Mr. Len Clarkson, Water Specialist and Drinking Water Officer for Vancouver Coastal Health will be joining the meeting by telephone to answer questions.

Moved/Seconded

THAT the Regular Council Meeting be opened to questions from the Gallery regarding the Water Quality Update.

CARRIED

10. QUESTION PERIOD ON WATER QUALITY

The Meeting was then open for questions from the public. A full list of the questions and responses can be found as an appendix to these meeting minutes.

At 11:45 a.m. the question period ended.

At 11:45 a.m. the Regular Meeting was recessed.

At 11:55 p.m. the Regular Meeting was reconvened.

11. WATER QUALITY UPDATE – NEXT STEPS

After the Recess Council had further discussions with respect to the water quality review and next steps. Staff advised that all homes tested will be re-tested and once completed the results will be shared with the public. Staff also advised that testing has been expanded to include the Village's sampling sites, the Village Wells, Signal Hill Elementary School, Pemberton Secondary School, the Health Centre, Pemberton Children's Centre and Pemberton Community Centre.

Discussion also took place regarding the Village's commitment to this issue being a priority for both Council and Staff, the need to ensure continued communications to the public on this matter and the value in holding a Town Hall meeting once the test results have been received and further information has been compiled. Staff advised that a

FAQ sheet will be developed as a result of the questions asked at the meeting and posted on the Village Website, Facebook Page and via eNEWS.

Moved/Seconded

THAT the Regular Council Meeting, scheduled for Tuesday, April 5th at 7PM, be moved to 5PM;

AND THAT a Town Hall Meeting to update residents on the Water Quality be scheduled for Tuesday, April 5th at 7PM at 1350 Aster Street**.

CARRIED

NOTE: Later in the week it was determined that it would be appropriate to hold the Town Hall Meeting at the Pemberton Community Centre. As a result, both the Regular Council Meeting and the Town Hall Meeting will be held at the Pemberton Community Centre at the times noted above. Subsequently, the Regular Meeting scheduled for 5PM was postponed to April 19, 2016.

12. REPORTS

a) Office of the CAO

i. BC Climate Leadership Plan

Moved/Seconded

THAT the Village of Pemberton formally participate in the Provincial Government's public consultation process on the development of the BC Climate Leadership Plan;

AND THAT Staff be directed to prepare a response, before the deadline of March 25th, 2016, that includes the Village's desire to see the Climate Leadership Plan's commitments strengthened and to mention that certain current policies and projects, such as Site C, fracking and the Massey Tunnel directly contradict the Plan's goals to reduce greenhouse gas emissions.

CARRIED

Moved/Seconded

THAT staff prepare a separate report outlining options to be considered by the Village to strengthen its ability to pursue Climate Action to be brought forward at a future meeting.

CARRIED

At 1:00 p.m. the Regular Council Meeting was recessed.

At 1:06 p.m. the Regular Council Meeting reconvened.

ii. Strategic Communications Plan and Background Report - Adoption

Moved/Seconded

THAT the Strategic Communications Plan and Background Report be amended to remove the definition of Community Champion.

CARRIED

Moved/Seconded

THAT Council adopt the Strategic Communications Plan and Background Report as amended.

CARRIED

b) Corporate & Legislative Services

i. Lower Mainland Local Government Association – Resolution – Ambulance Assist Cost

Moved/Seconded

THAT the draft resolutions prepared for consideration by the Lower Mainland Local Government Association be tabled until after the LMLGA Conference in May;

AND THAT Council members who are attending the LMLGA Conference in May attend the working session on this issue to gather more information.

CARRIED

c) Mayor

Mayor Richman reported on the following:

- Met with RCMP to discuss security for the 2016 Pemberton Music Festival.
- Attended the Stewardship Pemberton fundraiser on March 12th; there were approximately 140 attendees and \$6,000 raised.
- Read a book to 60 Grade 1 students at Signal Hill Elementary and took questions from the children.
- Will be attending a meeting of the Women's Institute on Monday, March 21st.
- Reminded that Spring Break starts on Friday, March 18th.
- Reminded that Earth Hour is 8:30 – 9:30 p.m. on March 19th; encouraged increased participation to improve results from last year.
- BMX Fundraiser at Mount Currie Coffee Company on March 19th at 8:00 p.m.

d) Councillors

Councillor Ross

- Reported that she sat on the “Women in Leadership” panel hosted by the Library as part of International Women’s Day Celebrations.

Councillor Linklater

Councillor Linklater did not have anything to report at this time.

Councillor Helmer

Councillor Helmer did not have anything to report at this time.

13. BYLAWS

There were no bylaws for consideration for this meeting.

14. CORRESPONDENCE

a) For Information

- Correspondence from the Sea-to-Sky Clean Air Society, dated March 2, 2016, thanking the Village for the contribution of funding to support the 2016 Bike to Work Week initiative.**

Moved/Seconded

THAT the correspondence be received.

CARRIED

b) For Action

- Correspondence from Mayor Marg Lampman, District of Lillooet, requesting support in passing a resolution in support of the District’s initiative to re-establish a passenger rail service between North Vancouver and Prince George.**

Moved/Seconded

THAT the resolution passed by the District of Lillooet Council regarding the reinstatement of passenger rail service between North Vancouver and Prince George be supported by the Village of Pemberton.

CARRIED

15. DECISION ON LATE BUSINESS

There was no late business.

16. LATE BUSINESS

17. NOTICE OF MOTION

There was no notice of motion.

18. AJOURNMENT

Moved/Seconded

THAT the March 15, 2016 Regular meeting be adjourned at 2:00 p.m.

CARRIED

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

WATER QUALITY QUESTION & ANSWER PERIOD

Niki Vanker – 7459 Aspen Boulevard

Q: What happens to the water that is sitting in the hot water tank, and if we empty out tank completely will there still be lead sitting in the bottom, and how do we deal with it? Should the hot water tank be flushed?

Dr. Martiquet (Vancouver Coastal Health - VCH)

A: We know that hot water does increase the absorption of the lead. However, when taking a shower there is no health concern because lead cannot be inhaled or absorbed through the skin. Hot water that remains in the tank overnight and is not flushed has no impact for bathing and dishwashing. It is recommended to use cold water for cooking and drinking. The water supply is safe, it is the piping, fittings and fixtures in homes, particularly older homes, that can cause the lead absorption. If you flush your pipes, the lead will be removed.

Carolyn McBain – 1431 Willow Drive

Q: It is not all older homes that were tested, there were actually newer homes that were tested as well. Could this be clarified as to why newer homes would also have lead in the water?

Dr. Martiquet (VCH):

A: There can be exceptions; for instance if a plumber used old solder when installing new pipes, lead will be a factor in plumbing fixtures in any home whether new or old.

Len Clarkson (VCH):

Noted that another source of lead can come from brass fittings in plumbing.

Stephanie Doyon – 1482 Larch Street

Q: Do the brass fittings only cause lead due to pH levels in the water or is that normal to all water?

Len Clarkson (VCH):

A: The ability for water to absorb lead is due to the pH and the alkalinity and hardness. In the case of the Village the pH can trend below the aesthetic objectives set out in the national guidelines due to the low alkalinity levels. VCH supports the Village work in addressing this issue.

Cindy Filipenko – 1472 Olive Street

Q: Concerned test results showed 6 times the allowable amount which is 60 parts/per billion as compared to Flint Michigan which declared a “crisis” for 25 parts/billion. How concerned should we be?

Dr. Martiquet (VCH):

A: We are looking at a first flush sample that was 60 parts/billion. Sampling needs to be redone after 2 minutes of flushing; the results should approach zero lead concentration when the second sample is tested. Flint Michigan is a different story – we are not talking about prolonged concentration of 60 parts/billion, we are talking about a first flush sample from water that has remained standing overnight.

Anna Helmer – 7451 Aspen Street

Q: Would VCH support the Village going back to the original surface water source until the pH levels are resolved?

Len Clarkson (VCH):

A: VCH would not support this. The surface water presented a bigger problem as it did not meet microbiological disinfection standards, resulting in a boil-water advisory to resolve the risk of infection to the population. The water system overall is good and VOP should be proud of their water. VCH is recommending flushing and providing centralized treatment. VOP Staff are to be commended on how they manage the water distribution system.

Veronica Woodruff – 1641 Highway 99 – (SLRD Area C)

Q: In the salmon in the Classroom project, the salmon came out with twisted spines when hatched in the school water supply. Are you concerned about water at the community centre and schools?

Dr. Martiquet (VCH):

A: The schools have been advised to flush their pipes prior to the children coming to school.

Len Clarkson (VCH):

A: Speaking with SD48, both Signal Hill Elementary School and Pemberton Secondary School have been flushing their pipes, due to the size of the buildings and the fact that the water sits standing overnight, on weekends and school breaks. Although not a fish biologist it is likely that fish mortality would be due to copper present in the water rather than lead.

Veronica Woodruff – 1641 Highway 99 – (SLRD Area C)

Q: Was the VOP water tested for other parameters? It is commonly understood that there are high levels of arsenic found in wells.

Len Clarkson (VCH):

A: Pemberton water does not have high levels of arsenic; that is found in some private wells north of Pemberton. NOTE: All other parameters are noted in the Annual Reports published on the Village's website.

Mayor Mike Richman:

Q: Have the schools been flushing for a while or is this a new protocol?

Len Clarkson (VCH):

A: Flushing the schools has been taking place for several years, it is a long standing precautionary measure which was reaffirmed three years ago in correspondence to all School Districts within the Vancouver Coastal Health Authority (included lower mainland school districts).

Niki Vanker – 7459 Aspen Boulevard

Q: How frequently throughout the day is flushing required in homes?

Len Clarkson (VCH):

A: Absorption of lead occurs in standing water over time, such as overnight or after residents being away for a weekend. It is recommended that you flush until the water runs cold.

Dr. Martiquet (VCH):

Noted that another concern in older houses is the presence of lead in paint. As well, lead has been used in paint for toys, particularly those that come from Southeast Asia. We must work to mitigate the presence of lead from all sources.

Mark Mendonca – 1475 Balsam Street

Q: From VCH's perspective, would it be prudent to be testing schools and community centres on a regular basis?

Len Clarkson (VCH):

A: School District 48 was engaged three years ago when VCH did a reassessment of lead levels. It was suggested to the School District that if they want to avoid flushing that they undertake regular sampling and testing but it is costly. With regard to community centres, it is up to the owners to undertake sampling if they desire. VCH encourages testing but cannot mandate it in these areas as private service connections are beyond the scope of their authority and not regulated by VCH. Again, flushing is encouraged.

Anna Helmer – 7451 Aspen Street

Q: Need clarification that VCH is only responsible for the source water to meet certain parameters; is that the limit of your response?

Len Clarkson (VCH):

VCH permits, inspects and regulates the Pemberton water system. VCH does not permit or regulate water once delivered to the customers' service connection. The line from the property line to the building is the responsibility of the property owner.

Anna Helmer – 7451 Aspen Street

Q: Does VCH do testing at the property line?

Len Clarkson (VCH):

A: VCH does not do any testing/sampling. The Village of Pemberton is responsible for testing/sampling the water supply and they monitor the source water and distribution system. There is no obligation on the part of VOP to monitor water on private property.

Rob Szachury - 7395 Larch Street

Q: Was it VCH that directed the Village go to a subsurface well, was it a health concern to go from surface to drilled Well and can the Village go back to the surface water system and install an ultraviolet sterilization system to address the biological concerns?

Len Clarkson (VCH):

A: The Village looked at this a number of years ago. The Village supply was Pemberton Creek which is highly turbid due to glacial melt, which would require it to be filtered prior

to treatment. The complex treatment for filtration would cost millions of dollars. At the time, it was felt that finding an economical source in town was the better direction.

Stephanie Doyon - 1482 Larch Street

Q: What are the long term effects of drinking water with low pH, particularly to children?

Dr. Martiquet (VCH):

A: Low pH is not the issue and has no impact on health. The issue is what it is leached into the water due to corrosivity caused by low pH.

Anna Helmer – 7451 Aspen Street

Q: What are the long term effects of lead ingestion for children?

Dr. Martiquet (VCH):

A: Children are more vulnerable and you want to limit their exposure to lead sources.

Mayor Mike Richman

Q: At the levels being discussed, what is level of risk for children who may have consumed the water?

Dr. Martiquet (VCH):

A: The risk is negligible for young children with normal household use of water. If you had a parent who used nothing but first flush water to make baby formula it could be an issue.

Leanne Patterson - 7445 Dogwood Street:

Q: Is there a way to test for lead exposure in humans?

Dr. Martiquet (VCH):

A: Yes, through blood tests. As the Medical Health Office for Pemberton for the past 25 years, I have never had any conversation remotely related to lead or toxicity with any of the family doctors in Pemberton. Nor has there been any report of exposure to lead. If there is a concern blood tests can be ordered by your family doctor.

Niki Vanker – 7459 Aspen Boulevard

Q: Have there been any studies or information about the adverse effects of low pH in regards to PEX or plastic piping in houses?

Len Clarkson (VCH):

A: Not to the knowledge of VCH. Plumbing materials need to meet plumbing code. With regular household use of water (flushing toilets, showering, watering plants) there should not be an issue as the water is moving as opposed to sitting. Flushing water for consumption is still recommended as a redundant measure.

Rob Szachury - 7395 Larch Street:

Q: If I take my children in today for testing, as they have only drank Pemberton water at schools and since they were babies, then is it anticipated that they should have high levels of lead in their system?

Is the lead they have ingested throughout their lives still in their system and can we test for that?

Dr. Martiquet (VCH):

A: Yes, blood can be tested. If you have normal household water procedures it is likely your children's' blood levels will be negative for lead.

Carolyn McBain - 1431 Willow Drive

Q: What are "normal procedures" for water; what does that mean?

Len Clarkson (VCH):

A: Activities such as flushing toilets, showering and running water are normal household procedures. If you occasionally get a mouthful of first flush water that is above 10 parts/billion that is not a concern: the Guidelines for Canadian Drinking specify 10 part/billion based on a lifetime of exposure. The numbers you see in guidelines are based on a lifetime of exposure at that level. It is the overall challenge of determining the total amount of lead ingested including from food and other exposures.

Niki VanKerk – 7459 Aspen Boulevard

Q: Does lead get absorbed into plants and food from watering your garden, or washing food such as strawberries if you happen to use the first flush to wash them?

Len Clarkson (VCH):

A: Most of the lead in food is comes through cooking as the water is heated; the lead in water would be absorbed in the food through the cooking process. I am not familiar with it being absorbed into vegetables and fruit when washing.

Dr. Martiquet (VCH):

Another concern in past was tinned food in which lead solder was used to seal the cans. This is no longer practiced.

Carolyn McBain -1431 Willow Drive

Q: Have you heard about taking clay to absorb lead toxicity in the body as an alternative health practice? Do you have any comments?

Dr. Martiquet (VCH):

A: Chelation therapy can be done for acute lead toxicity, but is not a common practice.

Stephanie Doyon - 1482 Larch Street.

Q: What happens if we test our children and they do have high concentrations of lead in their system?

Dr. Martiquet (VCH):

A: In order to allay public concern, the houses that showed high concentrations of lead need to be re-tested to reassure that what is being said here is the truth. There should be pre and post flushing test samples. We know that the VOP water supply is not contaminated and there is not going to be lead in the water after the water has been flushed.

NOTE: If your child does test positive for lead your family Doctor would advise

Rob Szachury - 7395 Larch Street:

Q: What are the effects of lead in children? What do I look for in my children? Behavioural issues/skin conditions?

Dr. Martiquet (VCH):

A: Effects would be behavioural issues and neurological complications. However these issues are with exposures magnitudes higher than Pemberton can possibly ever get.

At 10:46 a.m. Dr. Martiquet left the meeting.

Stuart Chadsey - 7465 Frontier Street:

Q: What is the timeline for installation of a system that will correct the pH in the water?

Mayor Mike Richman:

A: The Village started this process in December and the hope is to have a confirmed timeline shortly. The Village is working to determine the best system to be used. Initially 60 days was an estimate provided by our engineers; the goal to have a system in place in a couple of months. .

Stuart Chadsey – 7465 Frontier Street:

Q: So in 60 days there will be a system in place?

Mayor Mike Richman:

A: That is the goal but we will know the timelines better next week. However, depending on the system that is selected the timelines may be longer. Rest assured the Village has made this a top priority and will be working to have this matter resolved as quickly as is possible

Stuart Chadsey - 7465 Frontier Street:

Q: What will be added to the water? My concern is that the new system will result in another set of challenges?

Mayor Mike Richman:

A: The Village is working with our engineers and VCH to understand the best system that will work for the Village. The solution will address the low pH levels and as such address the corrosiveness of the water.

Len Clarkson (VCH):

Added that this is why VCH is pleased with the configuration of the new wells and reservoir as they are ideally suited for retrofit equipment to address pH levels.

NOTE: VCH subsequently confirmed that only approved food grade additives would be approved for use to address the pH.

Garth Phare – 3712 McRae Road (SLRD Area C)

Q: Was VCH aware of the 2006 report in which it is identified that the pH is low in the Village drinking water? Why did VCH not instruct the Village to address it?

Len Clarkson (VCH):

A: VCH has been advocating for the Village to pursue best practices. Low pH is not a regulatory infraction. The pH is an aesthetic value and can fluctuate. It was hoped that with the addition of the new well and of chlorination using sodium hypochlorite, which comes with an elevated pH, the low pH would be addressed. However, because such small doses of chlorine are being used it did not have the results expected.

Garth Phare – 3712 McRae Road (SLRD Area C)

Q: How long have you been advocating?

Mayor Mike Richman:

For clarification, in 2006 the Village considered other projects that would be coming forward such as the looping, the new well, reservoir, and it was believed that the new well and chlorine could address the pH levels.

Len Clarkson (VCH):

A: This is not a regulatory requirement and as such VCH can't mandate that levels be corrected; the source of the water is not the issue. Rather than seeing a proliferation of individual systems, VCH would rather see a centralized approach and as such have been advocating for this improvement because we want qualified personnel operating the water distribution system.

Anna Helmer – 7451 Aspen Street

Q: Why has there never been any in-home testing if you know that a low pH causes corrosiveness?

Mayor Mike Richman:

Q: And if it is known that low pH causes corrosion, why is it within acceptable levels?

Len Clarkson (VCH):

A: VCH has not been promoting testing but promoting flushing. Up until 3 years ago VCH encouraged flushing for 2 -3 minutes. As a result of variability in terms of size of plumbing systems within homes (i.e.: length of pipes/systems), VCH revised flushing protocols recommending that flushing is done until the water turns cold which means the arrival of fresh water from the water main. The goal is not to describe the problem in more detail but to fix the problem and in the long term hoping for a pH adjustment which we understand is coming.

In terms of the value of testing, it is clear that in older homes, you will have a high level of first flush depending on how long the water has been sitting. The longer it sits the higher the levels will be. Also depending on how warm the building is - that can also have an impact on the levels as the heat is a catalyst to enabling the chemical reaction between low pH and lead. If you flush for a period of time the levels will drop.

Cindy Filipenko – 1482 Olive Street

Q: Why has there been nine (9) years of inaction that has led to thousands of dollars in plumbing repairs to the people of this community and is now a potential health issue?

Mayor Mike Richman:

A: Good question, Staff is reviewing reports to understand what happened and at what point direction changed. It is understood that with the installation of the new well and chlorination that this issue was believed to be addressed. Right now with limited resources, we need to focus on two most important things which is to get information out to the public, and come up with a solution. Staff will be putting a history together but the bulk of our energy is keeping the public informed and finding a system that corrects the low pH.

Garth Phare – 3712 McRae Road (SLRD Area C)

Q: Why was the one thing that everyone in this community needs to survive put down the ladder in place of other things that make us feel good? Someone needs to step up and take responsibility.

Mayor Mike Richman:

A: This issue is not unique to Pemberton and is common throughout BC. I agree it should have been dealt with sooner and can't answer to who is responsible at this time. I understand your frustration; we need to investigate further to determine where the ball may have been dropped. It is important not to turn this into a blame game rather focus on what is important now.

Anna Helmer – 7451 Aspen Street

Called for the Village of Pemberton to curtail all other business and focus on water, sewer and taxation.

At 11:08 a.m. Len Clarkson left the meeting.

Mayor Mike Richman:

Advised that the water issue is the single biggest focus for Council and Staff at this time and there is nothing more pressing.

Stephanie Doyon - 1482 Larch Street:

Q: Knows personally people in town who have been affected by heavy metal poisoning, it is pretty clear that this must have come from ingesting the Pemberton water.

Mayor Mike Richman:

A: There are many different sources of heavy metal and as noted by Dr. Martiquet the lead levels found in Pemberton are of level of magnitude too low to result in extreme illness.

Rob Szachury - 7395 Larch Street:

Q: Are there lead service lines within the Village distribution system?

Tim Harris – VOP Manager of Operations and Development:

A: Public Works has investigated and not identified any lead-based lines.

Rob Szachury - 7395 Larch Street:

Q: Has the VOP tested residences that have been retrofitted to plastic lines?

Tim Harris, VOP Manager of Operations & Development Services:

A: There were a variety of homes tested and we cannot account for variables in piping.

Cindy Filipenko – 1472 Olive Street:

Q: Will there be an evening Town Hall meeting to address this issue?

Mayor Mike Richman:

A: The Village is waiting until the results of the second set of testing have been received and our engineers and VCH have had an opportunity to review the information and make recommendations on the best system to install. The Village is considering holding a Town Hall meeting once we have additional information, but will also keep the public informed via other channels (website, Facebook).

NOTE: Subsequently later in the Regular Meeting Council determined to hold a Town Hall Meeting on April 5th at 7PM. The meeting will be held at the Pemberton Community Centre.

Rob Szachury - 7395 Larch Street:

Q: Can you advise on the timeline of the next testing?

Tim Harris, VOP Manager of Operations & Development Services:

A: The Village will be retesting this week with the hope that results will come by end of next week or beginning of the week after.

Russell Mack – SLRD Electoral Area C Director – D’Arcy:

Mr. Mack commented on his time as the Village of Pemberton Public Works Manager and Fire Chief, noting that in 2006 and 2007 it was felt that the installation of the third Well and chlorination would raise the pH level. As well, the Village undertook a water looping project to address fire flows and ensure chlorine flows throughout the system. Mr. Mack also clarified that the water at the Plateau comes from the Village water mains and not from Mount Currie water sources.

Mr. Mack further clarified that at no time has the Village had to replace fire hose connections as a result of corrosion. The replacement was a result of the oxidization of an 18 year old fixture on Engine 1.

Stuart Chadsey - 7465 Frontier Street :

Q: Will this new system be installed within in 60 days as suggested or should I be buying a water filtration system?

Mayor Mike Richman:

A: The 60 days was a figure provided by our engineers but that timeframe could be adjusted. The goal is to have the issue resolved as quickly as possible but it is difficult to put an exact date on it as there are variables to consider depending on the system chosen. It is expected there will also be a transition process following installation in order for testing to be performed.

Carolyn McBain – 1431 Willow:

Q: Will there be a competitive process to purchase and install this new system?

Nikki Gilmore – Chief Administrative Officer:

A: The system that will be purchased is very specialized but we will undertake a full RFP process to ensure the Village gets the best value.

Niki Vanker - 7451 Aspen Street:

Q: Does the Village have emergency communications protocol in place?

Nikki Gilmore, Chief Administrative Officer:

The Village has been developing a Strategic Communications Plan which is before Council today for adoption. This will include the action to establish an emergency communications plan and protocol.

Cindy Filipenko – 1472 Olive Street

Q: To Councillor Helmer, who was on Council in 2006: Why did the commitment to the installation of a soda ash system not get addressed and the project not get completed?

Councillor Helmer:

A: Noted that she did not recall all the details but noted that the new well and chlorination system was expected to address this issue.

Garth Phare - 3712 McRae Road (SLRD Area C)

Q: Were the flushing protocols recommended before or is this the first time the Village has been aware of this process?

Mayor Mike Richman:

A: The Village was not aware that flushing was recommended within private homes.

Russell Mack – SLRD Electoral Area C Director – D’Arcy:

Mr. Mack reminded those in attendance that every time you use your toilet, have a shower, turn on the tap you are in effect flushing your system.

Rob Szachury - 7395 Larch Street:

Q: Is there any liability exposure on the part of the Village?

Mayor Mike Richman:

A: The Village consulted its insurers, the Municipal Insurance Association and was advised that as the Village has been following the provincial guidelines and VCH direction, our exposure is limited.

Rob Szachury - 7395 Larch Street:

Q: Why did the Village start this project now, and is there provincial funding available given the challenges other communities are also seeing with this issue?

Mayor Mike Richman:

The Village started this project in 2015 as Council made it a priority based on feedback we all received during the campaign in the fall of 2014. At this time there is no provincial funding but we are always looking for grant opportunities.

At 11:45 a.m. the Question Period ended.

**VILLAGE OF PEMBERTON
-SPECIAL COUNCIL MEETING MINUTES-**

Minutes of the SPECIAL Meeting of Council of the Village of Pemberton held on Tuesday, April 5, 2016 at 2:00 p.m. in Council Chambers, 7400 Prospect Street. This is Meeting No. 1423.

IN ATTENDANCE: Mayor Mike Richman
Councillor Ted Craddock
Councillor Jennie Helmer
Councillor James Linklater
Councillor Karen Ross

STAFF IN ATTENDANCE: Nikki Gilmore, Chief Administrative Officer
Sheena Fraser, Manager of Corporate & Legislative Services

Public: 0

1. CALL TO ORDER

At 2:00 p.m. Mayor Richman called the meeting to order.

2. APPROVAL OF AGENDA

Moved/Seconded
THAT the Agenda be approved as presented.
CARRIED

3. IN CAMERA

Moved/Seconded
THAT pursuant to Section 90 (1) (d) security of the property of the municipality, (e) acquisition, disposition or expropriation of land and (k) negotiations of the Community Charter, the Council of the Village of Pemberton serve notice to hold an In-Camera Meeting on today's date for the purpose of dealing with matters for which the public shall be excluded from attending.
CARRIED

At 2:01 p.m. Council moved In Camera.

At 2:57 p.m. Council rose without report from In Camera.

4. RISE WITH REPORT

Council Rose without Report.

5. AJOURNMENT

Moved/Seconded
THAT the April 5, 2016 Special meeting be adjourned at 2:57 p.m.
CARRIED

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
29 of 336

**VILLAGE OF PEMBERTON
-SPECIAL COUNCIL MEETING MINUTES-**

Minutes of the SPECIAL Meeting of Council of the Village of Pemberton held on Wednesday, April 6, 2016 at 5:00 p.m. in Council Chambers, 7400 Prospect Street. This is Meeting No. 1424.

IN ATTENDANCE: Mayor Mike Richman
Councillor Ted Craddock
Councillor Jennie Helmer
Councillor James Linklater
Councillor Karen Ross

STAFF IN ATTENDANCE: Nikki Gilmore, Chief Administrative Officer
Sheena Fraser, Manager of Corporate & Legislative Services

Public: 0

1. CALL TO ORDER

At 5:05 p.m. Mayor Richman called the meeting to order.

2. WAIVING OF PUBLIC NOTICE

Moved/Seconded

THAT pursuant to Section 127 (4) of the *Community Charter* and Section 8 (a) of Council Procedure Bylaw No. 788, 2015 notice of this Special Meeting of Council, to be held Wednesday, April 6, 2015, be waived.

CARRIED

3. APPROVAL OF AGENDA

Moved/Seconded

THAT the Agenda be approved as presented.

CARRIED

4. DRINKING WATER TOWN HALL MEETING FOLLOW UP

Moved/Seconded

THAT correspondence be sent to Dr. Paul Martiquet, Vancouver Coastal Health Authority, Public Health Officer for attending the Drinking Water Town Hall meeting and participating on the expert panel;

AND THAT the correspondence advise that the Village feels strongly that screening and testing for lead should be readily available under the current medical services plan to all residents who live in the Village of Pemberton and outside boundary residents who are serviced through the Village water distribution system;

AND THAT a copy of the correspondence be sent to the medical clinics in Pemberton and Whistler.

CARRIED

Note: Subsequent to this resolution being passed the Medical Health Officer sent a memo to all medical offices advising that testing is supported.

Moved/Seconded

THAT correspondence be sent to Len Clarkson, Vancouver Coastal Health Authority, Drinking Water Specialist for attending the Drinking Water Town Hall meeting and participating on the expert panel.

CARRIED

Moved/Seconded

THAT correspondence be sent to Shehzad Somji, Secretary-Treasurer, Rick Hume – Director of Facilities and Services, Ian Curry – Ian Curry, Assistant Director of Operations and Marilyn Caldwell, Director of Instruction Learning Services thanking them for attending the Drinking Water Town Hall Meeting and participating on the expert panel.

CARRIED

Moved/Carried

THAT correspondence be sent to the Board of Trustees at Sea to Sky School District No. 48 respectfully requesting that daily flushing protocols be implemented and annual testing take place at Signal Hill Elementary School and Pemberton Secondary School;

AND THAT the School District send correspondence to parents providing an update on any changes to the flushing protocols if implemented.

AND THAT a copy of the letter be sent to the Minister of Education, the Minister of Health and Jordan Sturdy, MLA.

CARRIED

Note: Subsequent to this resolution being passed the School District issued on April 8th a notice respecting changes that will be implemented including putting hallway drinking fountains on continuous flow, closing off classroom drinking fountains, installation of faucet filters, installing filtered water stations and regular testing.

Moved/Seconded

THAT correspondence be sent Kevin Wong, Executive Director, Canadian Water Quality Association for attending the Drinking Water Town Hall meeting and participating on the expert panel.

CARRIED

5. AJOURNMENT

Moved/Seconded

THAT the April 6, 2016 Special meeting be adjourned at 5:10 p.m.

CARRIED

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

DRAFT

From: postmaster@pemberton.ca [mailto:postmaster@pemberton.ca]
Sent: March-16-16 5:00 PM
To: Council Request
Subject: pemberton.ca - Request to Appear Before Council Submission

Website Form Submission

The following was submitted from the pemberton.ca **Request to Appear Before Council Form**.

Full Name: Liz Scroggins
Email Address: LScroggins@innergex.com
Phone Number: 604 894 6862
Mailing Address: 200-666 Burrard St. Vancouver Bc V6C 2X8
Street Address: 101-7330 Arbutus St
Town/City: Pemberton
Province/State: BC
Postal/Zip Code: V0N 2L0
Country: Canada
Requested Date: 4/19/2016 12:00:00 AM
Purpose of Presentation: Upper Lillooet Hydro Project - Update Presentation
Agreement: I Agree

[Oliver Robson, Project Manager](#)

Date: Tuesday April 19, 2016

To: Nikki Gilmore, Chief Administrative Officer

From: Jill Brooksbank, Communications & Grants Coordinator

Subject: British Columbia Air Access Program - Airport Infrastructure Funding

PURPOSE

The purpose of this report is to provide Council with information regarding an application to the British Columbia Air Access Program for Airport Infrastructure Funding (\$95,700) and to request a resolution in support of a 25% matching contribution (\$23,925) towards the project, and a commitment to oversee the overall management of the grant.

BACKGROUND

The British Columbia Air Access Program (BCAAP) is a program to assist airports with funding capital infrastructure projects that: 1) help maintain safe and reliable airport facilities; and/or 2) will result in a significant, incremental economic benefit. BCAAP is a capital cost-sharing program administered by the BC Ministry of Transportation and Infrastructure.

Presently, the Pemberton Regional Airport (CYPS) is in need of considerable rehabilitation work, with runway resurfacing a top priority. As evident in the photos attached (Appendix A), the tarmac is riddled with large cracks, some measuring 10 cm in diameter. Cracks create an uneven surface and disrupt visual painted markings, which present safety hazards to aircrafts. Leaving cracks unchecked enables moisture to permeate the asphalt, leading to further degradation.

The airport is under the Village's purview and as such it is responsible for all maintenance and repair work. Crack sealing was undertaken in 2008 to repair the relatively smaller cracks. According to Asphalt Magazine, *"depending on the climate, the materials used, the pavement conditions and the technique used, crack sealing will last three to eight years"* (<http://asphaltmagazine.com/preventing-and-repairing-potholes-and-pavement-cracks/>). The largest of the cracks have not been addressed and continue to get worse through natural wear and tear and exposure to the elements.

The BCAAP offers up to 75% of project costs to cover such repairs, which must be completed within a year of receiving the funding.

DISCUSSION & COMMENTS

. Maintaining the integrity of the runway is vitally important to commercial operators, primarily catering to tourists and the film industry clients, who in turn contribute to the economic wellbeing of our community. Search and rescue, wildfire and forestry, and medevac operations, which

enhance the overall safety and security of our community, also rely on this infrastructure being adequately maintained.

Securing the Airport Infrastructure Grant funding will enable the Village to cover the majority of the costs associated with repairing this important infrastructure, which will increase the lifetime of the runway and safe operation by users.

Eligibility to apply to this grant program requires a resolution from Council supporting the proposed activities, and committing to manage the grant in accordance with BCAAP's requirements. All grant deliverables must be met and funds spent within a year of receiving the funding.

COMMUNICATIONS

There are no communications requirements related to applying for the airport infrastructure grant.

LEGAL CONSIDERATIONS

There are no legal, legislative or regulatory considerations at this time. Should the Village receive the funding the proposed repairs will help to mitigate risk related to accidents and damage to aircrafts.

IMPACT ON BUDGET & STAFFING

As only 75% of project costs are covered, the Village must contribute the remaining 25% or \$23,925, which had been included in the 2016 budget. The cost associated with applying for this grant has been accommodated in-house as grant sourcing and preparation is part of the day-to-day duties of the Communications and Grant Coordinator.

Large Cracks / Asphalt Repair	\$51,643
Small Crack Sealing	\$25,000
Repainting Markings	\$10,000
MOB	\$4,500
GST	\$4,557

PROJECT TOTAL	\$95,700
VOP CONTRIBUTION (25%)	\$23,925

INTERDEPARTMENTAL IMPACT & APPROVAL

If approved for funding this project will require supervision of the contractors. The aforementioned impacts are supported and can be incorporated into the daily routine of the Department of Operations & Development Services.



Tim Harris, Manager of Operations and Development Services

ALTERNATIVE OPTIONS

There are no alternative options presented for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

This initiative is consistent with Strategic Priority No. Three: Excellence in Service – by delivering the highest quality level municipal services within the scope of our resources; and Strategic Priority No. Four: Social Responsibility in which the Village strives to create a strong and vibrant community, citizen engagement and to ensuring a well-managed environment.

RECOMMENDATIONS

THAT the Airport Infrastructure Grant application and the activities proposed therein be supported;

AND THAT Council approves the 25% matching component up to \$25,000.

Attachments:

Appendix A: Photos of airport runway cracks in need of repairs

Jill Brooksbank, Communications & Grants Coordinator

CHIEF ADMINISTRATIVE OFFICER AND MANAGER REVIEW



Nikki Gilmore, Chief Administrative Officer

Photos of Pemberton Regional Airport



Ariel view of Pemberton Regional Airport



Traverse and random cracks on taxiway



Cold joint cracks across the apron area



Cold joint crack running the length of the runway



Cold joints on apron



Traverse cracks on runway



Large traverse cracks on apron



Cold joint on runway



Date: April 19, 2016

To: Nikki Gilmore, Chief Administrative Officer

From: Jill Brooksbank, Communications and Grants Coordinator

Subject: Bike BC Program, Friendship Trail Bridge Application

PURPOSE

To request a Council resolution to support the BikeBC grant application in order to secure additional revenue required for the Friendship Trail/Multi-Use Bridge project.

BACKGROUND AND COMMENTS

The Bike BC Program is a cost-shared program (up to 50% or \$1,000,000, whichever is less) where the Government of British Columbia will partner with local governments in the construction of new transportation cycling infrastructure.

The Ministry of Transportation and Infrastructure will be providing \$6 million in BikeBC funding to communities this year to enhance and expand cycling infrastructure such as bike lanes, multi-use paths and trails, and cycling/pedestrian bridges. The goal of the program is to promote transportation cycling (cycling to work, school, or errands) as a means of reducing traffic congestion and greenhouse gas (GHG) emissions.

The Provincial share is a maximum of 50% of Total Cost-Shareable Amount or \$1,000,000. If a third party, including another Provincial agency, is contributing to a project, that contribution must be deducted from the project's total eligible cost and the BikeBC share calculated on the balance. No approval will be granted for work already done or committed to, as the intent of the BikeBC program is to expand cycling infrastructure.

DISCUSSION

The Pemberton-Mount Currie Friendship Trail was conceived by the Village of Pemberton and Lil'wat Nation/Mount Currie Band (Lil'Wat) as part of the shared Winds of Change initiative. The proposed seven (7) kilometer pedestrian and bike trail will physically, socially and economically link the two neighbouring communities and the corresponding facilities and services they offer the region. The completed Friendship Trail will eventually connect to the Sea to Sky Trail, a pedestrian/cycling trail that will travel from West Vancouver to Lillooet (a portion of which is the Trans Canada Trail).

A significant requirement for the trail project is the construction of the Friendship Trail Bridge. The proposed pedestrian-friendly bridge over the Lillooet River will provide a vital connection for commuters using the Friendship Trail. Lil'Wat (approximately 2000 residents), the Plateau subdivision (200 residents), the Industrial Park and the future recreation site are all situated on the east side of the river, while the majority of the Village neighbourhoods (2200 residents)

downtown and community facilities are situated west of the river. The bridge will enable an important non-vehicular connection along the Friendship Trail and divert pedestrians, cyclists and the equine community from the highway route as a means of commuting.

To be eligible for funding municipalities must have infrastructure which forms part of a bicycle network plan prepared and adopted by a municipality or regional district.

COMMUNICATIONS

The Village of Pemberton will acknowledge the support of BikeBC as per funding requirements, should the project be approved.

IMPACT ON BUDGET, POLICY, STAFFING

A minimum of 50% of matching funding must be borne by the Village for the BikeBC funding. To date, Council has committed \$400,000 in funding to the project. In 2013, Regionally Significant Gas Tax funding, through the Union of British Columbia Municipalities, was approved in the amount of \$369,000 for bridge construction.

LEGAL CONSIDERATIONS

There are no legal concerns or issues identified at this time.

ALTERNATIVE OPTIONS


There are no alternative options presented at this time. This grant opportunity is in keeping with previously approved fundraising plans for the Friendship Trail / Multi-Use Bridge.

POTENTIAL GOVERNANCE CONSIDERATIONS

The construction of the Friendship Trail Bridge aligns with Strategic Priority No. 4: Social Responsibility in which the Village recognizes the importance and benefits of healthy and engaged citizens.


RECOMMENDATIONS

THAT Council supports the application of the BikeBC for grant funding, in the amount of \$430,190, to increase the revenue required for the Friendship Trail/Multi-Use Bridge construction.



Jill Brooksbank, Communications and Grants Coordinator

CHIEF ADMINISTRATIVE OFFICER AND MANAGER REVIEW



Nikki Gilmore, Chief Administrative Officer

Date: April 19, 2016
To: Nikki Gilmore, Chief Administrative Officer
From: Jill Brooksbank, Communications & Grants Coordinator
Subject: Regional Agencies Communication Workshop

PURPOSE

The purpose of this report is to present the concept of hosting a joint stakeholder workshop with the Village of Pemberton, Vancouver Coastal Health (VCH) and Sea to Sky School District #48 (SD48) to establish communications protocols.

BACKGROUND

As a result of discussions with the community and the feedback at the Drinking Water Town Hall Meeting held on April 5, 2016, we understand that there is a need for increased collaboration and communications between the Village of Pemberton, Sea to Sky School District No. 48 and Vancouver Coastal Health. As a result, staff is recommending hosting a communications workshop to establish an inter-agency communications protocol so that we can effectively share our messaging between agencies but most importantly with the Pemberton community.

DISCUSSION & COMMENTS

Staff is proposing to host a workshop with VCH and SD48 to establish communication protocols at a local level to better respond to applicable events in an efficient and timely manner.

During the water assessment results process, several communications gaps have been identified between the agencies. With a strong commitment to communication, the Village of Pemberton wishes to initiate discussions on how we can better serve our community through improved communications between agencies and our residents.

Staff is proposing a facilitated workshop with relevant staff, Council and Board members from each organization. This workshop will also give stakeholders the opportunity to share their internal communications protocols, which will inform on how we can better work together. Further, this will also give members from each organization the opportunity to meet one another face-to-face and further strengthen working relationships between staff and elected officials of each organization.

Council may choose to have the meeting facilitated by a contracted facilitator or by an experienced staff member. Staff recommends that the meeting be facilitated, so that information and decision making can be consolidated into a report which will inform the development of a communications protocol.

COMMUNICATIONS

There are no communications considerations at this time.

LEGAL CONSIDERATIONS

There are no legal considerations at this time.

IMPACT ON BUDGET & STAFFING

Should Council support hosting the meeting, staff time will be required to organize the workshop, and if required, contracting a facilitator for the meeting.

INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts at this time. Upon completion and approval by Council, the communications protocols will inform the Crisis and Emergency Communications plans that will be developed in late 2016/early 2017.



Nikki Gilmore, Chief Administrative Officer

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

The outcome of the workshop will be to improve communications, and in so doing, strengthen relations with all stakeholders.

ALTERNATIVE OPTIONS

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

This initiative is consistent with Strategic Priority No. Two: Good Governance – a commitment to citizen engagement, being an open, honest and accountable government, and fiscal responsibility; Strategic Priority No. Three: Excellence in Service – by delivering the highest quality level municipal services within the scope of our resources.

RECOMMENDATIONS

THAT Council provide direction to staff on organizing a Communications workshop with the intent of developing a communications protocol between the Village of Pemberton, Vancouver Coastal Health and Sea to Sky School District No. 48.



Jill Brooksbank
Communications & Grants Coordinator

CHIEF ADMINISTRATIVE OFFICER REVIEW AND MANAGER



Nikki Gilmore, Chief Administrative Officer

**VILLAGE OF PEMBERTON
-REGULAR COUNCIL MEETING AGENDA-**

Agenda for the **Regular Meeting** of Council of the Village of Pemberton to be held Tuesday, April 19th, 2016, at 9:00 a.m. in **Council Chambers, 7400 Prospect Street**. This is Meeting No. 1425.

"This meeting is being recorded on audio tape for minute-taking purposes as authorized by the Village of Pemberton Audio recording of Meetings Policy dated September 14, 2010."

Item of Business	Page No.
1. CALL TO ORDER	
2. APPROVAL OF AGENDA	
Recommendation: THAT the Agenda be approved as presented.	
3. RISE WITH REPORT FROM IN CAMERA (CLOSED)	
4. ADOPTION OF MINUTES	
a) Regular Council Meeting No. 1422 – Tuesday, March 15th, 2016	
Recommendation: THAT the minutes of Regular Council Meeting No. 1422 held Tuesday, March 15, 2016, be adopted as circulated.	
b) Special Council Meeting No. 1423 – Tuesday, April 5th, 2016	
Recommendation: THAT the minutes of the Special Council Meeting No. 1423, held Tuesday, April 5 th , 2016 be adopted as circulated.	
c) Special Council Meeting No. 1424 – Tuesday, April 6th, 2016	
Recommendation: THAT the minutes of the Special Council Meeting No. 1424, held Tuesday, April 6 th , 2016 be adopted as circulated.	
5. BUSINESS ARISING FROM COMMITTEE OF THE WHOLE	
a) Tax & Utility Single Billing	
Recommendation from the Committee of the Whole: THAT Utility Billing be added to the Village of Pemberton Tax Bill to establish single billing for both taxes and utilities;	
AND THAT single billing be implemented in 2017;	
AND THAT notice of this change in billing procedure be issued in the 2016 tax notices and over 2016 to ensure all property owners are aware of the change procedure.	
6. COMMITTEE MINUTES - FOR INFORMATION	
There are no Committee Minutes for presentation.	

7. DELEGATIONS

- a) **Oliver Robson, Project Manager and Liz Scroggins, Project Coordinator/Community Liaison, Innergex Upper Lillooet Hydro Project - Update**

8. REPORTS

a) Office of the CAO

- i. **Airport Infrastructure Funding - British Columbia Air Access Program (BCAAP)**

Recommendation: THAT the Airport Infrastructure Grant application and the activities proposed therein be supported;

AND THAT Council approves the 25% matching component up to \$25,000.

- ii. **BC Bike Program, Friendship Trail Bridge Application**

Recommendation: THAT Council supports the application of the BikeBC for grant funding, in the amount of \$430,190, to increase the revenue required for the Friendship Trail/Multi-Use Bridge construction.

- iii. **Regional Agencies Communication Workshop**

Recommendation: THAT Council provide direction to staff on organizing a Communications workshop with the intent of developing a communications protocol between the Village of Pemberton, Vancouver Coastal Health and Sea to Sky School District No. 48.

b) Operations and Development Services

- i. **Pemberton Valley Men's Shed – Status Report**

Recommendation: THAT Council receives this report for information;

AND THAT Council provides direction on the proposed arrangement to lease the middle bay of the Village of Pemberton owned and maintained Storage Shed located at 7400 Prospect to the PVSS for temporary use as the Pemberton Valley Tool Library until such time as another suitable location is established.

c) Mayor

d) Councillors

9. BYLAWS

a) First, Second and Third Readings

- i. **Municipal Ticket Information Utilization Bylaw No. 800, 2016**

Recommendation: THAT Municipal Ticket Information Amendment Bylaw No.800, 2016 be given first, second and third reading.

Recommendation: THAT Staff review the Bylaw Dispute Adjudication System established by the SLRD and report back to Council.

ii. 2016-2020 Five Year Financial Plan Bylaw No. 801, 2016

Recommendation: THAT Five Year Financial Plan Bylaw No. 801, 2016 be given first, second and third reading.

iii. 2016 Annual Tax Rates Bylaw No. 802, 2016

Recommendation: THAT Annual Tax Rates Bylaw No. 802, 2016 be given first, second and third reading.

iv.

10. CORRESPONDENCE

a) For Action

- i. Correspondence from Deryk Lee, President, Public Works Association of British Columbia, dated March 22nd 2016, requesting that the Village declare May 15th – 21st 2016, 'Public Works Week'.**

Recommendation: THAT the Village consider declaring May 15th – 21st 2016, 'Public Works Week' in the Village of Pemberton (see proclamation attached).

- ii. Correspondence from Phill Read, Pemberton Secondary School, Red Devils Association, dated March 22nd 2016, requesting donations to support the High School Sports Programs and Competitions.**

Recommendation: THAT the Council provide direction with respect to a contribution to the fundraising event.

- iii. Correspondence from Jack Crompton, Chair of Squamish-Lillooet Regional District dated March 31st 2016, requesting a letter of support for the SLRD Solid Waste and Resource Management Plan to the Ministry of Environment.**

Recommendation: THAT Council send a letter of support to the Ministry of Environment for the SLRD Solid Waste and Water Resource Management Plan.

- iv. Correspondence from the Honourable Peter Fassbender, Minister of Community, Sport and Cultural Development, dated April 8th 2016, inviting Council to share its perspectives on the issues surrounding the sharing economy with new competition from transportation and accommodation companies such as Airbnb, Uber and Lyft and develop a better understanding of the opportunities and challenges they create for citizens and communities.**

Recommendation: THAT correspondence be sent to The Honourable Peter Fassbender, Minister of Community, Sport and Cultural Development, advising that the Village is eager to participate in discussions related to the sharing economy.

and outlining the challenges and impacts the Village is currently facing as a result of the proliferation of Airbnb properties.

AND THAT a copy of the staff Report to Council titled “Short Term Vacation Rentals Update”, dated February 2nd, 2016, be included as an attachment.

b) For Information

- i. **Correspondence from Peter Ronald, Programs Officer, UBCM thanking Mayor and Council for submitting an application for the Community Wildlife Protection Plan Update for the Strategic Wildfire Prevention Initiative.**
- ii. **Copy of correspondence from Janet and Hugh Naylor to Pamela Goldsmith M.P. Re: Canada National Railway Crossings within the SLRD.**
- iii. **Correspondence from Mayor Nancy Wilhelm-Morden, Chair, Transportation Advisory Group, dated March 17th 2016, providing an update on the activities of the Transportation Advisory Group (TAG).**
- iv. **Correspondence from Dr. Paul Martiquet, Medical Health Officer, Vancouver Coastal Health, providing updates and information as a follow up to the Drinking Water Town Hall Meeting held April 5th 2016.**

Recommendation: THAT the above correspondence be received for information.

11. DECISION ON LATE BUSINESS

12. LATE BUSINESS

13. NOTICE OF MOTION

14. QUESTION PERIOD

15. IN CAMERA

- a) **Recommendation: THAT pursuant to Section 90 (1) (e) acquisition, disposition or expropriation of land and (k) negotiations of the Community Charter, the Council of the Village of Pemberton serve notice to hold an In-Camera Meeting on today's date for the purpose of dealing with matters for which the public shall be excluded from attending.**

16. ADJOURNMENT

Seniors' Housing & Support Initiative



E-mail: lgps@ubcm.ca
525 Government Street, Victoria, BC, V8V 0A8



2015 Age-friendly Community Planning & Project Grants APPLICATION FORM

Completed application forms and required attachments are due no later than **October 31, 2014**.
Please type directly in this form or print and complete. Attach additional pages if required.

Questions? Contact Local Government Program Services at lgps@ubcm.ca or (250) 356-2947.

Applicant Information

Local Government: Village of Pemberton

Complete Mailing Address: Box 100, 7400
Prospect Street

Contact person: Jill Brooksbank

Position: Grant Coordinator

Phone: 604.894.6135 X 230

E-mail: jbrooksbank@pemberton.ca

Other Contact

Contact person: Marnie Simon

Position: Grants Writer

Organization: Pemberton Valley Seniors
Society

Complete Mailing Address: 1/1400 Park
Street, Creekside, Pemberton V0N2L1

Phone: 604 894 0242

E-mail: marnie_s@shaw.ca

1. PROJECT TITLE

PEMBERTON VALLEY MEN'S SHED - Creating a fun, safe environment for Senior Men to exchange ideas, build lasting relationships and build on men's health and well-being.

2. FUNDING REQUESTED

\$20,000

3. PROPOSED TYPE OF ACTIVITY - See examples in the Program & Application Guide.

- Age-friendly Community Planning (e.g. Age-friendly assessment or action plan)
- Age-friendly Community Project (e.g. seniors' resource directory or health information program)

4. PROPOSED FOCUS AREAS - Please indicate which Age-friendly components will be the primary focus incorporated into your plan or project.

- | | |
|--|--|
| <input type="checkbox"/> Outdoor spaces & buildings | <input checked="" type="checkbox"/> Social participation |
| <input type="checkbox"/> Transportation (including traffic safety) | <input type="checkbox"/> Communication & information |
| <input type="checkbox"/> Housing | <input checked="" type="checkbox"/> Civic participation & employment |
| <input checked="" type="checkbox"/> Respect & inclusion | <input type="checkbox"/> Community support & health services |
| | <input type="checkbox"/> Assessment dealing with all features |

5. DESCRIPTION OF PROPOSED ACTIVITIES - Please describe the specific activities you plan to undertake.

Members of the Pemberton Valley Seniors Society (PVSS) have noticed a lack of engagement of older men in the current social and physical activities available to seniors in the Pemberton and District communities. The idea of a Men's Shed project was first introduced by a Vancouver Coastal Health Seniors worker who recently relocated from Australia. The worker shared her experience of working with a community who had been successful in launching a men's shed project and the success that followed around the engagement of men who had previously been almost invisible in the community. In the Pemberton Valley many men and couples have downsized from homes or farms where the men had access to their own workshops and were actively involved in a variety of hobbies. The loss of this opportunity to pursue their hobbies is recognized as a reduction in quality of life for many senior men. Isolation, particularly for single men, is problematic. It is also recognized that the social well-being of seniors is influenced by a number of factors, including satisfaction with life, social connectedness with others, and whether or not they are productive and active in the community. Poor levels of social well-being can negatively impact health and quality of life.

The Pemberton Valley Men's Shed will be a communal version of an individual man's workshop. From our research we have found that Men's Sheds are beginning to spring up in different parts of Canada, Manitoba and BC. Looking inside the shed you might see a number of men restoring furniture, perhaps restoring bicycles for a local school, making bat or bird boxes or fixing lawn mowers or making a kids cubby house to raffle. You might also see a few young men working with the older men learning new skills and maybe also learning something about life from the men they work with. You will see tea-bags, coffee cups and a comfortable area where men can sit and talk. You will probably also see an area where men can learn to cook for themselves or they can learn how to contact their families by computer.

Working with the Village of Pemberton, local realtors and service clubs we anticipate that an appropriate building will be identified as a possible 'shed'. Research is currently underway to investigate the possibility of relocating two portables to the land owned by the Lions where a seniors housing complex is located. There is also a possibility of co-location in the Art Barn leased by the Pemberton Arts Council.

The first stage of the project will see the engagement of a coordinator/contractor to assist in the development and establishment phase of the shed. Some tools and furniture will need to be purchased, however many of the men that we have spoken to have indicated that

is successful, they will donate tools, machinery and their time.

If you are applying for project funding, have you completed an Age-friendly Plan?

Yes No

If no, how was the proposed project identified?

6. PROGRAM GOALS & OBJECTIVES - How will your project meet the goals of the 2015 Age-friendly Community Planning & Project program? How will the project make your community more age-friendly?

Goals and objectives for the community of Pemberton, SLRD Area C, and Mt Currie residents in the creation of a men's shed include:

1. Improved social connectedness of older men - by providing a space for men from all walks of life, to socialize and participate in meaningful activities in a safe, busy and stress-free environment in an atmosphere of old-fashioned camaraderie.
2. Improved mental and physical health of older men through their engagement in men's shed activities.
3. Improved intergenerational understanding through the engagement of youth and other community members in men's shed activities
4. Intercultural understanding and communication - The activities chosen will allow men to meet and socialize with people from other communities.

7. INTENDED OUTCOMES & DELIVERABLES - What do you hope the project will achieve? What will be the specific deliverables?

1. Provision of a Men's Shed that provides a safe, friendly and inclusive environment where males are able to gather together and/or work on meaningful projects at their own pace, in their own time and in the company of other males;
2. An established place for men where all men are welcome and where mutual respect and trust are established through social interaction and activities designed to maintain the health and wellbeing of men;
3. A focal point in the community for the identification of men's health issues and actions to resolve those issues by providing a link between the primary health services and the many men who may have no regular contact with those services;
4. A supportive environment where senior men in need of help arising from mental illness or other debilitating illnesses feel welcome; and
5. A place where men can gather, engage in activities and share experiences that will ease the transition of men retiring from full-time employment and/or moving from rural farming properties to an urban environment.

8. COMMUNITY PARTNERS - Please list all confirmed partners that will directly participate in your plan or project and the specific role they will play (e.g. project implementation, community consultations, etc.).

Confirmed partners include Pemberton Valley Seniors Society, Vancouver Coastal Health, Mt

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016

Currie Elders Group, Squamish Lillooet Regional District & the Rotary Club of Pemberton. We anticipate that a strong partnership with the local schools (District 48) will be pursued with the vision of sharing skills between members of the Men's Shed and school aged children on collaborative projects such as building benches and other such projects. We also propose to offer opportunities for all community members to become engaged in the shed activities. The Pemberton Stewardship Society has offered to support the project and has expressed interest in engaging the shed community to assist in their nature projects. The Library has offered to host visiting guest speakers and to provide access to resources including computers and subscriptions to magazines. Our partnership with Mount Currie and N'quatqua Communities is continually growing and developing and we have a vision to be able to offer some mobile activities to those communities, as well. Members of both of these communities are also members of the Pemberton Valley Seniors Society and have been involved in discussions on the project. Many members of the PVSS are also members of Lions and Rotary and both organisations have expressed an interest in supporting the project wherever possible.

Please describe any direct participation by seniors in your plan or project (e.g. name of organization, role in project)

Members of the PVSS have been involved from the onset in the development of the Men's Shed project. Board members have assisted in approaching Village of Pemberton Council, Rotary and other potential community partners to share the idea and to garner support. Members have also undertaken research and assisted in writing the grant application. At all times throughout the grant process there has been open communication and collaboration between all interested parties. PVSS Board members have also presented about the project at several local organisation's meetings and have met with representatives from the Kelowna Men's Shed and Vancouver Tool Lending Cooperative to discuss and share ideas.

9. EVALUATION - What tools will be used to evaluate the project (e.g. participant surveys, tracking tools, external evaluation, etc.)? How will this information be used?

Evaluation tools such as surveys and tracking participation at the Men's Shed will be used. The Village of Pemberton municipality and PVSS have been the recipient of a number of community grants and have a good understanding of the requirements and parameters of collecting data.

10. IMPACT ON LOCAL GOVERNMENT - List any policies, practices, plans or local government documents that will be developed or amended as a result of your project.

Although there are several plans in place that support Senior's programming (most notably the Village's Strategic Plan, Official Community Plan and the Age Friendly Plan), The Men's Shed will give us the unique opportunity to reach out and connect with our Senior men, a typically hard to engage demographic.

Studies have indicated that this group is at a high risk for isolation, depression, and suicide. This typically is in relation to having to downsize into smaller housing or assisted housing, resulting in the loss of garages/workshops; a place for men to retreat to work on projects and home repairs. Understanding the true impact of aging in relation to health matters and the loss of independence for our Senior men, will enable us to better plan and support this group and all of our Senior residents.

The Men's Shed project will be a value add to programs focused on supporting seniors to age in place. Additionally, it is anticipated that future planning for the seniors community will also include a housing needs assessment, this will be used to gauge the real needs for seniors housing going into the future.

11. SUSTAINABILITY - Will the project be sustained after the grant funding?

Yes No

If yes, how?

The Pemberton Men's Shed will be overseen by the Pemberton Valley Seniors Society(PVSS). Discussions with many members of the community has shown that there are an abundance of tools and equipment that are available for donation, we plan to develop a tool lending cooperative as part of the program. This endeavour, which will be overseen by the PVSS, will provide a very affordable lending scheme for all community members. Money raised from the lending scheme will be used to subsidise the Men's Shed. We anticipate receiving funds from the local non-profit organizations and service clubs. Fundraising and the search for grants to support the continuation of the shed will become part of the annual fundraising efforts for the PVSS.

The Men's shed will be a social enterprise that creates value and that value should form the basis of assured revenue from those that benefit from shed activities and the community at large.

12. ADDITIONAL COMMENTS - Please use this space to add any additional comments.

According to a Health Canada report (The Chief Public Health Officer's Report on The State of Public Health in Canada 2010), although suicide is often associated with younger people, men over the age of 85 have – on average – higher suicide rates (29 per 100,000) than all other age groups. The social well-being of seniors is influenced by a number of factors, including satisfaction with life, social connectedness with others, and whether or not they are productive and active in the community. Poor levels of social well-being can negatively impact health and quality of life. The Australian Men's Shed Movement has grown to over a 1000 Sheds across the country, their website <http://www.mensshed.org> provides detailed information about all aspects of developing a mens shed, resources etc. It also provides a link to other international men sheds which includes New Zealand, UK, Ireland and Canada. Contact has already been made with Doug Mackie, founder of the Manitoba Men's Shed (visit the following for information <http://youngretired.ca/menssheds/>) who has generously provided the PVSS with numerous resources, including an offer to visit and assistance with planning.

13. REQUIRED ATTACHMENTS - Please submit the following with your application:

- Council/Board Resolution – Indicating local government support for the proposed project and a willingness to provide overall grant management
- Detailed budget

14. SIGNATURE – Applications are required to be signed by the local government applicant. Please note all application materials will be shared with the Province.

Sharon Fraser

Signature

*Acting Chief Administrative
Officer*

Name and Title

Please send the completed Application Form and all required attachments as an e-mail attachment to Local Government Program Services (UBCM) at lgps@ubcm.ca.

If you submit by e-mail, hardcopies and/or additional copies of the application are not required. Please submit your application as either a Word or PDF file(s) and note "2015 SHSI" in the subject line.

AGE-FRIENDLY BC - For more information on Age-friendly BC or the recognition program, please refer to Appendix 1 of the Program & Application Guide or contact the Seniors' Health Promotion Directorate by e-mail: AgeFriendlyBC@gov.bc.ca or phone: (250) 387-9520.

PEMBERTON AND AREA - 2015 PEMBERTON MENS SHED - PROJECT BUDGET

ITEM	DESCRIPTION	CAPITAL PURCHASE	PROGRAM PURCHASE	QUANTITY	UNIT OF MEASURE	COST	TOTAL	GRAND TOTAL
1	2 Portables	YES	NO	1		\$ 5,250.00	\$ 5,250.00	
2	Furnishings & Equipment	YES	NO	1		\$ 750.00	\$ 750.00	
							\$ -	
Subtotal Capital Purchases							\$ 5,250.00	\$ 6,000.00
3	Program Coordinator 28 hrs per month (12 months)		YES	336	HOURS	\$ 25.00	\$ 8,400.00	
4	Insurance - Public Liability		YES	1		\$ 1,500.00	\$ 1,500.00	
5	Office Supplies inc laptop rental & WIFI		YES			\$ 3,000.00	\$ 3,000.00	
6	Utilities inc Hydro		YES	1		\$ 1,100.00	\$ 1,100.00	
Subtotal Program Purchases for 8 months							\$ 14,000.00	\$ 14,000.00
Project Request From UBCM SHSI								\$ 20,000.00

October 29, 2014,

To Whom It May Concern:

I am writing this letter of support on behalf of the Vancouver Coastal Health Seniors Supported Housing Program which provides a structured activity program to the Seniors of Pemberton, Area C, Mt Currie and Darcy areas.

In my role as coordinator I am acutely aware of the difficulties we have in engaging men in our activities, there have been many attempts from agencies/services and the Pemberton Valley Seniors to be inclusive in program development and program design that encourage participation but the distinct lack of attendance by the men is always felt and noted.

The Village of Pemberton's application for a Union of BC Municipalities Grant to start up a Men's Shed in Pemberton will provide men from all walks of life to engage with other men in a way that helps to foster support and reduce social isolation and disengagement.

I acknowledge the value to all men and the wider community that a Men's shed located in Pemberton will provide.

Regards



Fran Hopkins
Coordinator, Seniors Supported Housing Program.



ROTARY CLUB OF PEMBERTON

October 29th 2014

RE: UNION OF BC MUNICIPALITIES GRANT – PEMBERTON MEN’S SHED PROJECT

To whom it may concern.

The Rotary club of Pemberton is pleased to offer this letter as expression of support for the application by the Village of Pemberton for a Union of BC Municipalities Grant to fund the start up of a Men’s Shed in Pemberton.

Members of the Pemberton Valley Seniors Society have brought to our attention the concern about the number of disengaged and socially isolated senior men in Pemberton and surrounding communities. They have also presented us with information about the Men’s Shed organization in Canada and overseas. We recognize the value, to both retired men and the community at large, that a Men’s Shed located in Pemberton would provide.

Our members would be willing to support the establishment of the proposed Men’s Shed in whatever way would be appropriate.

Respectfully,

A handwritten signature in black ink that reads "Stuart McConnell" followed by the date "Oct 29, 2014".

Stuart McConnell



Box 430, Pemberton, B.C. V0N 2L1

24 October, 2014

To whom it may concern

re: UBCM Grant Application – Pemberton Men’s Sheds

Pemberton Valley Seniors Society has become increasingly aware of research showing the need to promote more social interaction among seniors to help improve physical and mental health. Particularly highlighted is the need to encourage senior men to become more socially involved to avoid potential depression and other negative health outcomes.

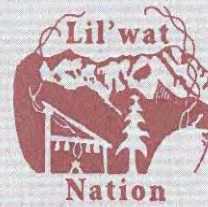
The activities proposed in this grant application would provide a great opportunity to discover how a Men’s Shed program could address this need in Pemberton as it already has in other locations in Canada and around the world.

The opportunity to provide for a meeting place where retired men can share their life experiences, knowledge and skills with each other as well as pass them on to younger members of our community will be invaluable to them. Interacting with other community groups and individuals on projects would also give the men a sense of pride and community.

Yours truly,

Gail McKellar

President, Pemberton Valley Seniors Society,



October 29, 2014

Senior's Housing & Support Initiative: Age-friendly Community Project

UBCM Grant Application: Project Title: Pemberton Men's Shed

To whom it may concern,

I am writing this letter to state that I strongly endorse the UBCM Grant Application titled: Pemberton Men's Shed. I have been working as a community physiotherapist for the last twenty years in Pemberton, Mount Currie, N'quatqua and D'Arcy. During this time, I have worked with many of the seniors and elders in these communities.

I have been very aware that during social gatherings that involve all of the above mentioned communities, there is a distinct lack of attendance and participation by men during these events. I am aware that this lack of attendance leads to social isolation and a lowered sense of self worth. This can significantly contribute to health challenges as these men would not be feeling productive or valuable to their community, and would not be maintaining as active a body and mind. This isolation and loneliness can also lead to depression and relationship breakdowns.

I believe that the construction of a Men's Shed that offers senior male engagement while participating in a variety of meaningful projects can greatly reduce social isolation and its associated risks to health and wellbeing of the older male population. Partnership with local schools on collaborative projects will offer opportunities for these men to mentor school aged children, encouraging intergenerational learning. A Men's Shed will also break down barriers between men from different walks of life and cultural backgrounds. It would be an ideal environment for First Nation men to share their skills and knowledge regarding their traditional carving techniques with men from Pemberton.

In closing, I feel a successful application to construct a Men's Shed will have many benefits on a physical, mental and social level. This would have a great impact on improving the quality of senior men's lives.

Sincerely,

Anita Samuels, B.S.R.

Registered Physiotherapist

Local Government Program Services

...programs to address provincial-local government shared priorities



Administration provided
by UBCM

Funding provided by
Province of B.C.



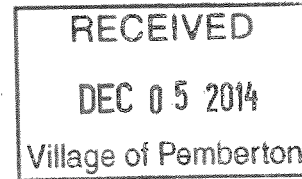
**For program
information, visit the
Funding Programs
section at:**

www.ubcm.ca

LGPS Secretariat

Local Government House
525 Government Street
Victoria, BC, V8V 0A8

E-mail: lgps@ubcm.ca
Phone: (250) 356-2947
Fax: (250) 356-5119



December 2, 2014

Mayor Richman and Council
Village of Pemberton
Box 100
Pemberton, BC V0N 2L0

Re: 2015 Age-friendly Community Planning & Projects Grant Approval and Terms & Conditions

Dear Mayor and Council,

Thank you for submitting an application for the 2015 Age-friendly Community Planning & Projects grant program funded through the Seniors' Housing & Support Initiative.

I am pleased to inform you that the Evaluation Committee has approved funding for your project, *Pemberton Valley Men's Shed*, in the amount of \$20,000.00.

A cheque in the amount of \$14,000.00 will follow shortly under separate cover. This amount represents 70 percent of the total approved grant. The remaining 30 percent will be available after a satisfactory final report and financial summary has been submitted to UBCM.

The Ministry of Health has provided funding for this program. Ministry staff is preparing a news release to be issued by mid-December. We ask that you do not publicly disclose this grant award until their announcement has been made.

The general Terms & Conditions for this grant are attached. In addition, in order to satisfy the terms of the contribution agreement, we have the following requirements:

- (1) The funding is to be used solely for the purpose of the above named project and for the expenses itemized in the budget that was approved as part of your application;
- (2) All project activities must be completed within 12 months and no later than December 31, 2015;
- (3) The Final Report Form is required to be submitted to UBCM within 30 days of project end date and no later than January 30, 2016.
- (4) Any unused funds must be returned to UBCM within 30 days following the project end date.

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
59 of 336

We would like to encourage all grant recipients to utilize the age-friendly guides as part of their projects. *Becoming an Age-friendly Community: Local Government Guide*, the *Global Age-Friendly Cities Guide* and *Age-Friendly Rural and Remote Guide* are on the UBCM website and at www.SeniorsBC.ca/agefriendly.

Please note that descriptive information regarding successful applicants under the 2015 Age-friendly Community Planning & Projects grant program will be posted on UBCM's website and all final report materials will be made available to the Ministry of Health.

On behalf of the Evaluation Committee, I would like to congratulate you for responding to this opportunity to support age-friendly communities and to increase the opportunities for seniors to age in place.

If you have any questions, please feel free to contact Local Government Program Services at (250) 356-2947 or by email at lgps@ubcm.ca.

Sincerely,



Peter Ronald
Programs Officer

cc: Jill Brooksbank, Grant Coordinator, Village of Pemberton

Enclosure

Date: April 19, 2016
To: Nikki Gilmore, Chief Administrative Officer
From: Sheena Fraser, Manager of Corporate & Legislative Services
Subject: Municipal Ticket Information Utilization Bylaw No. 800. 2016

PURPOSE

To present to Council for first, second and third readings the Village of Pemberton Municipal Ticket Information Utilization Bylaw that updates the schedule listing by amending Schedule 1 (designated authority) and Schedule 10 (Business Licence Fines) and adds a fine schedule for the Outdoor Water Use Regulation Bylaw No. 792, 2015.

BACKGROUND

In 2004, pursuant to Section 264 of the *Community Charter*, the Village implemented a Municipal Ticket Information Utilization Bylaw (MITU) as a means to enable the Bylaw Enforcement Officer or other members of the Village staff, as appropriate, the ability to issue tickets for bylaw infractions or offences for certain bylaws. This Bylaw also allowed the RCMP to issue tickets for infractions related to certain Village bylaws as listed in the Schedules of the Bylaw.

In 2012 and subsequently in 2014 the MTIU Bylaw was amended to accommodate the inclusion of new bylaws that had been adopted over time. At this time, staff is bringing forward a new bylaw as a means of consolidating the prior amendments, amending Schedule 10 (Business Licence fine) and adding in Schedule 11 (Outdoor Water Use Regulation Fines).

DISCUSSION & COMMENTS

Amending or updating existing bylaws is an important housekeeping function that ensures Village staff are utilizing the most recent information respecting enforcement and the levying of fines.

The new Municipal Ticket Information Utilization Bylaw provides staff and the RCMP the ability to enforce the bylaws noted in the schedules without the added cost of laying charges through the court system.

Staff has been reviewing the current bylaw infraction dispute process utilized by the Village with an aim to explore how the process may be improved. In this regard, it has been recommended that the Village consider participating in the Bylaw Dispute Adjudication System program which has recently been put in place by the Squamish Lillooet Regional District. This system has been established to create simple, fair and cost effective systems for dealing with minor bylaw infractions. The Village has looked into participating in this system in the past; however,

because the closed program was facilitated out of the lower mainland it was not necessarily cost effective. With the establishment of this System by the SLRD, staff feels there is value in reconsidering this process as an option to seeking resolution of compliance issues.

COMMUNICATIONS

There is no communication element required as the consideration of this bylaw is complimentary to the existing bylaws already in place and which are available on the Village website.

LEGAL CONSIDERATIONS

The establishment of a Municipal Tickets Information Utilization Bylaw meets with Section 264 of the *Community Charter*.

IMPACT ON BUDGET, POLICY, STAFFING

While the goal of bylaw enforcement is to gain compliance, this bylaw allows fines to be levied on infractions. The funds collected help to cover the costs associated with bylaw enforcement including public education and awareness activities and signage.

INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts or approvals required.

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

The consideration of this bylaw has no impact on neighbouring jurisdictions as the bylaws may only be enforced within the Village boundaries.

ALTERNATIVE OPTIONS

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

Updating the Municipal Ticketing Information Utilization Bylaw meets with Strategic Theme Two: Good Governance by providing a fiscally responsible way to handle bylaw infractions without having to go through the court process and with Strategic Theme Three: Excellence in Service by listing which bylaws tickets can be issued.

RECOMMENDATIONS

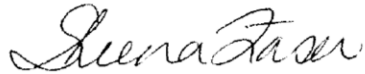
THAT Municipal Ticket Information Amendment Bylaw No.800, 2016 be given first, second and third reading.

THAT Staff review the Bylaw Dispute Adjudication System established by the SLRD and report back to Council.

Attachments:

Appendix A: Municipal Ticket Information Amendment Bylaw No. 800, 2016

MANAGER:



Sheena Fraser
Manager of Corporate & Legislative Services

CHIEF ADMINISTRATIVE OFFICER REVIEW



Nikki Gilmore, Chief Administrative Officer

VILLAGE OF PEMBERTON

Municipal Ticket Information Utilization Bylaw

BYLAW No. 800, 2016

WHEREAS Section 264 of the *Community Charter* authorizes the Council to, by Bylaw:

1. designate those bylaws which may be enforced by means of a form of ticket prescribed by regulation under Section 273;
2. designate bylaw enforcement officers for the purpose of enforcing bylaws by means of a prescribed form of ticket;
3. designate an offence against a bylaw by means of a word or expression on a ticket.

NOW, THEREFORE, the Council of the Village of Pemberton in open meeting assembled, enacts as follows:

1. TITLE

This Bylaw may be cited as “**Village of Pemberton Municipal Ticket Information Utilization Bylaw No. 800, 2016**”.

2. APPLICATION

2.1 The bylaws listed in Column 1 of Schedule 1 to this Bylaw may be enforced by means of a ticket in the form prescribed for the purpose of Section 264 of the *Community Charter*.

2.2 The persons appointed to the job positions or titles listed in Column 2 of Schedule 1 to this Bylaw are designated as bylaw enforcement officers pursuant to Section 264 of the *Community Charter* for the purpose of enforcing the bylaws listed in Column 1 of Schedule 1 opposite the respective job positions.

2.3 The words or expressions set forth in Column 1 of the Schedules to this Bylaw designate the offence committed under the bylaw section number appearing in Column 2 opposite the respective words or expressions.

2.4 The amounts appearing in Column 3 of the Schedules to this Bylaw are fines set pursuant to Section 265(1) of the *Community Charter* for the corresponding offences designated in Column 1.

3. REPEAL

The Village of Pemberton Municipal Ticket Information Utilization Bylaw No. 542, 2004 and Municipal Ticket Information Utilization Amendment Bylaw No. 708, 2012 and Municipal Ticket Information Utilization Amendment Bylaw No. 778, 2014 are hereby repealed.

READ A FIRST TIME this ____ day of _____, 2016.

READ A SECOND TIME this ____ day of _____, 2016.

READ A THIRD TIME this _____ day of _____, 2016

RECONSIDERED AND ADOPTED this ____ day of _____, 2016.

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

SCHEDULE 1

DESIGNATED BYLAW

DESIGNATED BYLAWS ENFORCEMENT OFFICERS

False Alarm Bylaw No. 556, 2005

Village Official
RCMP

Parking & Traffic Control Bylaw
No. 586, 2006

Village Official
RCMP

Smoking Bylaw No. 637, 2009

Village Official
RCMP

Animal Control Bylaw No. 651, 2010

Village Official
RCMP

Wildlife Attractant Bylaw No. 684, 2011

Village Official
RCMP
Conservation Officer

Firearms Regulation Bylaw No. 697, 2012

Village Official
RCMP
Conservation Officer

Noise Regulation Bylaw No. 699, 2012

Village Official
RCMP

Fire Prevention Bylaw No. 744, 2013

Village Official
RCMP

Business Licence Bylaw No. 751, 2014

Village Official

Outdoor Water Use Regulation Bylaw
No. 792, 2015

Village Official

SCHEDULE 2

FALSE ALARM BYLAW No. 556, 2005	SECTION	FINE
Second False Alarm	7(a)	\$50.00
Third False Alarm	7(b)	\$75.00
Fourth & Subsequent False Alarm	7(c)	\$100.00

SCHEDULE 3

PARKING & TRAFFIC CONTROL BYLAW No. 586, 2006

	SECTION	FINE
Park in Contravention of Traffic Control Device	3	\$50.00
Fine Amount if Paid Within 30 Days		\$25.00

SCHEDULE 4

SMOKING BYLAW No. 637, 2009

SECTION FINE

Operator Violation	3	\$100.00
Personal Violation	4	\$50.00

SCHEDULE 5

ANIMAL CONTROL BYLAW No. 651, 2010	SECTION	FINE
Unlicensed Dog at Large– First Offence	3.1	\$75.00
Licensed Dog at Large- First Offence	3.1	\$30.00
Licensed Dog at Large – Second Offence	3.1	\$100.00
Licensed Dog at Large – Third Offence	3.1	\$150.00
Licensed Dog at Large – Fourth and subsequent offences	3.1	\$300.00
Allow or suffer any dog to leave or deposit Excrement on any public place or private Property without cleaning up	3.4	\$100.00
Vicious Dog – Not Muzzled	7.3	\$500.00
Vicious Dog – Not Confined	7.4	\$500.00
Any Other Ticket Offence		\$50.00

SCHEDULE 6

WILDLIFE ATTRACTANT BYLAW No. 684, 2011 SECTION FINE

Improper Storage of Garbage – First Offence	3.1	\$100.00
	4.2	\$100.00
	4.3	\$100.00
	5.1	\$100.00
Improper Storage of Garbage – Second Offence	3.1	\$200.00
	4.2	\$200.00
	4.3	\$200.00
	5.1	\$200.00
Improper Storage of Garbage – Third Offence	3.1	\$400.00
	4.2	\$400.00
	4.3	\$400.00
	5.1	\$400.00
Failure to Provide/Maintain Resistant Container - First Offence	3.2	\$100.00
	4.1	\$100.00
	4.4	\$100.00
Failure to Provide/Maintain Resistant Container - Second Offence	3.2	\$200.00
	4.1	\$200.00
	4.4	\$200.00
Failure to Provide/Maintain Resistant Container - Third Offence	3.2	\$400.00
	4.1	\$400.00
	4.4	\$400.00
Failure to Comply Pickup/Removal Times - First Offence	3.3	\$100.00
	3.4	\$100.00
Failure to Comply Pickup/Removal Times - Second Offence	3.3	\$200.00
	3.4	\$200.00
Failure to Comply Pickup/Removal Times - Third Offence	3.3	\$400.00
	3.4	\$400.00
Improper Disposal – First Offence	3.5	\$100.00
	3.6	\$100.00
	3.7	\$100.00
	3.8	\$100.00
	3.11	\$100.00
	4.2	\$100.00

Improper Disposal – Second Offence	3.5	\$200.00
	3.6	\$200.00
	3.7	\$200.00
	3.8	\$200.00
	3.11	\$200.00
	4.2	\$200.00
Improper Disposal – Third Offence	3.5	\$400.00
	3.6	\$400.00
	3.7	\$400.00
	3.8	\$400.00
	3.11	\$400.00
	4.2	\$400.00
Improper Placement – First Offence	3.9	\$100.00
Improper Placement – Second Offence	3.9	\$200.00
Improper Placement – Third Offence	3.9	\$400.00
Placement of Explosive Device	3.10	\$500.00
Intentionally Feeding Wildlife – First Offence	5.2	\$100.00
Intentionally Feeding Wildlife – Second Offence	5.2	\$200.00
Intentionally Feeding Wildlife – Third Offence	5.2	\$400.00
Failure to Remove Attractants – First Offence	5.3	\$100.00
	5.4	\$100.00
Failure to Remove Attractants – Second Offence	5.3	\$200.00
	5.4	\$200.00
Failure to Remove Attractants – Third Offence	5.3	\$400.00
	5.4	\$400.00

SCHEDULE 7

FIREARM REGULATION BYLAW No. 697, 2012	SECTION	FINE
Discharge in Prohibited Area	4	\$250.00

SCHEDULE 8

NOISE REGULATION BYLAW No. 699, 2012	SECTION	FINE
Noise During Quite Hours – First Offence	3.1	\$100.00
Noise During Quite Hours – Second Offence	3.1	\$200.00
Noise During Quite Hours – Third Offence	3.1	\$400.00
Permit Noise During Quiet Hours – First Offence	3.2	\$100.00
Permit Noise During Quiet Hours – Second Offence	3.2	\$200.00
Permit Noise During Quiet Hours – Third Offence	3.2	\$400.00
Prohibited Noise – First Offence	3.3	\$100.00
Prohibited Noise – Second Offence	3.3	\$200.00
Prohibited Noise – Third Offence	3.3	\$400.00
Construction Noise – First Offence	5.1	\$250.00
Construction Noise – Second Offence	5.1	\$500.00

SCHEDULE 9

FIRE PREVENTION BYLAW No. 744, 2013	SECTION	FINE
Failure to provide private hydrant flow test results	6.8(a)(ii)	\$150
Failure to maintain, repair, or replace private fire hydrant	6.8(b)	\$150
Failure to keep private hydrant free of snow, ice, or other materials or free from mechanical damage	6.8(c)	\$150
Failure to ensure access to private fire hydrant	6.8(d)	\$150
Failure to report deficiencies that affect private hydrant	6.8(e)(i)	\$150
Failure to bag or cover out of service private hydrant	6.8(f)	\$150
Unauthorized use of fire hydrant	6.10	\$1,000
Failure to paint private hydrant to City's specifications	6.11	\$150
Failure to maintain minimum clearance around private hydrant	6.13	\$150
Failure to maintain ground cover around private hydrant	6.15	\$150
Failure to maintain clear path in front of private hydrant	6.16	\$150
Failure to maintain clear view of private hydrant	6.17	\$150
Removing a fire hydrant without permission	6.18	\$1,000
Failure to provide, install and maintain Smoke Alarm	6.19	\$200
Failure to maintain emergency/exit lighting and exit signs	6.21(a)	\$200
Failure to test or maintain portable extinguisher(s)	6.21(b)	\$200
Failure to provide and maintain means of egress	6.21(c)	\$200
Failure to maintain exit doors	6.21(d)	\$200

Failure to maintain private roadways for Pemberton Fire Rescue access in conformance with the British Columbia Fire Code	6.21(e)	\$200
Failure to provide, maintain private roadways, access roads and fire lanes in conformance with Pemberton Fire Rescue criteria	6.21(f)	\$200
Design and installation of gate controlling access not in conformance to Pemberton Fire Rescue criteria	6.21(g)	\$200
Failure to maintain standpipe, hose systems, and automatic sprinkler systems in conformance with the British Columbia Fire Code	6.21(h)	\$200
Failure to install and maintain commercial cooking equipment exhausts and fire protection systems in conformance with the British Columbia Fire Code	6.21(i)	\$200
Exceeding the maximum occupant load contrary to the British Columbia Fire Code	6.21(j)	\$1,000
Allowing combustible material(s) to accumulate in quantities or in locations contrary to the British Columbia Fire Code	6.21(k)	\$200
Failure to store, handle, use or process all flammable and combustible liquids in conformance with the British Columbia Fire Code	6.21(l)	\$200
Failure to maintain fire separations in conformance with the British Columbia Fire Code	6.21(m)	\$200
Failure to dispose of Combustible Material or take precautions to prevent fire	6.25	\$500
Failure to submit Fire Safety Plan in an acceptable format and in conformance with British Columbia Fire Code	6.29(a)	\$150
Failure to submit Fire Safety Plan within 90 days	6.29(b)	\$150
Failure to provide Fire Safety Plan in a location or manner acceptable to Fire Chief	6.29(c)	\$150
Failure to install and maintain approved Fire Safety Plan Lock Box	6.30	\$150
Failure to install and maintain approved Lock Box	6.32	\$150

Failure to correctly install Lock Box	6.33(a)	\$150
Failure to provide keys or devices in Lock Box	6.33(b)	\$150
Failure to provide access to Fire Safety Plan Box or Lock Box	6.34	\$150
Failure to allow installation or maintenance of Fire Safety Plan Box or Lock Box	6.35	\$150
Starting or allowing open air fire without a permit	7.1	\$250
Failure to follow terms and conditions for burning of yard waste	7.5	\$250
Failure to follow terms and conditions for burning of waste created by land clearing	7.6	\$250
Failure to follow terms and conditions for a hazard abatement/fuel modification burning permit	7.7	\$250
Failure to follow terms and conditions for an agricultural burning permit	7.8	\$250
Failure to follow terms and conditions for a residential cooking permit	7.10	\$250
Using portable incinerator or other portable device for burning garbage, rubbish or waste material	7.11	\$250
Discharging fireworks without a valid notice of discharge permit	8.1	\$250
Selling or offering for sale fireworks without a valid fireworks sales permit	8.4	\$250
Storing, handling or discharging fireworks in an unsafe manner or as to create a nuisance	8.12	\$250
Discharging fireworks on a public roadway	8.15	\$250
Failure to remove or dispose of firework debris	8.16	\$250
Possessing, selling or discharging of firecrackers or noisemakers	8.19	\$250

Failure to surrender fireworks

8.22(a)

\$250

SCHEDULE 10

BUSINESS LICENCE BYLAW No. 751, 2014	SECTION	FINE
Resident Business without Business Licence:	6.2	
1 st Offence		\$ 75.00
2 nd Offence (1 week after 1 st offence)		\$150.00
3 rd Offence (1 week after 2 nd offence)		\$300.00
Subsequent Offences		\$450.00
Non-Resident Business without Business Licence:	6.3	
1 st Offence		\$ 75.00
2 nd Offence (1 week after 1 st offence)		\$150.00
3 rd Offence (1 week after 2 nd offence)		\$300.00
Subsequent Offences		\$450.00
Failure to Provide Access	7.1	\$150.00
Failure to Display Valid Licence:	11.2	
1 st Offence		\$ 75.00
2 nd Offence (1 week after 1 st offence)		\$150.00
Carrying on Business while Suspended:	13.5	
1 st Offence		\$150.00
2 nd Offence (1 week after 1 st offence)		\$300.00
3 rd Offence (1 week after 2 nd offence)		\$450.00
Mobile Vendor without Business Licence	14.4(d)	
1 st Offence		\$300.00
2 nd and Subsequent Offences		\$450.00

SCHEDULE 11

Outdoor Water Use Regulations Bylaw No. 792, 2015

FINE

Section: 4.1

Level One – First Offence	\$100.00
Level One – Second Offence	\$200.00
Level One – Third Offence	\$300.00

Section 4.2

Level Two – First Offence	\$100.00
Level Two – Second Offence	\$200.00
Level Two – Third Offence	\$300.00

Section 4.3

Level Three – First Offence	\$100.00
Level Three – Second Offence	\$200.00
Level Three – Third Offence	\$300.00

Section 4.4

Level Four – First Offence	\$250.00
Level Four – Second Offence	\$500.00
Level Four – Third Offence	\$1,000.00

VILLAGE OF PEMBERTON

BYLAW No. 801, 2016

A bylaw of the Village of Pemberton respecting the Five Year Financial Plan beginning with the year 2016.

The Council of the Village of Pemberton, in open meeting assembled, enacts as follows:

1. Schedule "A" attached hereto and made part of this Bylaw is hereby adopted and is the Village of Pemberton Five Year Financial Plan established with the year ended December 31, 2016.
2. This Bylaw may be cited for all purposes as the "Village of Pemberton Five Year Financial Plan Bylaw No. 801, 2016."

READ A FIRST TIME this 19th day of April, 2016.

READ A SECOND TIME this 19th day of April, 2016.

READ A THIRD TIME this 19th day of April, 2016.

ADOPTED this _____ day of _____, 2016.

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

**Village of Pemberton
2016 - 2020 Five Year Financial Plan**

	2016 Budget	2017 Budget	2018 Budget	2019 Budget	2020 Budget
Revenues:					
Taxation	1,898,332	2,113,293	2,154,843	2,382,591	2,429,527
Water and sewer user rates	1,538,459	1,623,228	1,709,693	1,797,887	1,887,844
User charges	1,363,263	1,390,528	1,418,339	1,446,706	1,475,640
Penalties and interest income	19,000	19,380	19,768	20,163	20,566
Government transfers:					
Provincial	1,705,980	560,000	571,200	582,624	594,276
Federal	-	-	-	-	-
Other local governments	265,624	270,936	276,355	281,882	287,520
Investment income	6,500	6,630	6,763	6,898	7,036
Other revenues	366,000	500,000	510,000	520,200	530,604
Collections on behalf of other governments	2,349,314	2,396,300	2,444,226	2,493,111	2,542,973
	9,512,472	8,880,296	9,111,186	9,532,062	9,775,987
Expenditures:					
General government	2,347,812	2,404,768	2,452,863	2,585,254	2,646,959
Fire protection services	502,926	512,985	523,244	533,709	544,383
Development and planning services	435,790	444,506	453,396	462,464	471,713
Public works and parks	912,561	932,312	952,459	1,018,174	1,038,538
Water utility	832,777	955,254	974,359	993,846	1,013,723
Sewer utility	941,985	1,230,825	1,256,641	1,281,774	1,307,409
Airport services	173,200	276,664	282,197	287,841	293,598
Transfers to other governments	2,349,314	2,396,300	2,444,226	2,493,111	2,542,973
	8,496,365	9,153,613	9,339,386	9,656,173	9,859,297
Annual Surplus/(Deficit)	1,016,107	(273,317)	(228,199)	(124,112)	(83,310)
ADJUSTMENTS REQUIRED TO BALANCE FINANCIAL PLAN TO CONFORM WITH LEGISLATIVE REQUIREMENTS					
Non-cash items included in Annual (Surplus)/Deficit					
Amortization on tangible capital assets	899,220	910,720	913,420	1,043,420	1,053,420
Cash items NOT included in Annual (Surplus)/Deficit					
Capital expenditures	2,569,485	65,000	27,000	3,900,000	50,000
Loan proceeds	(533,536)	0	0	(3,900,000)	(50,000)
Long term debt payments	205,667	383,377	383,377	568,745	568,745
Capital lease payments	138,000	138,000	138,000	138,000	138,000
Transfers to/(from) Statutory Reserves					
Transfers to/(from) Non-Statutory Reserves	(102,210)	216,000	270,000	324,000	378,000
Transfers to/(from) Unappropriated Surplus	(362,079)	(164,974)	(133,156)	(111,436)	(114,634)
Financial Plan Balance	0	0	0	0	0

**Village of Pemberton
5 Year Financial Plan Bylaw No. 801, 2016
2016 Revenue Policy Disclosure**

- The table below shows the proportion of proposed 2016 revenue raised from each funding source. One column shows the proposed revenue including Transfer to Other Governments and the other excluding the Transfers to Other Governments. Transfers to Other Governments are funds requisitioned by other government or government agencies for specifically defined projects.

The Village has a bylaw to charge specific administrative fees for various tasks, such as tax certificates, titles searches, rentals as well as other tasks including a 10% administrative fee. This bylaw was last updated December 18th, 2012. By billing these fees to individual users, this allows a more realistic tax levy as the tax payers are not subjected to funding these miscellaneous expenses.

The Village of Pemberton will continue to seek other sources of revenue to reduce the reliance on property taxes.

In 2007, Council realized that the creation of a Capital Reserve and Equipment Reserve was prudent to reducing potential tax rate increases and borrowing for future capital projects. As such the Village will endeavor to build up reserves to fund major capital projects. Borrowing will be considered when a capital project will provide benefits to taxpayers over a long period.

Frontage and/or Parcel Taxes are taxes levied for the purpose of paying the debt on the Municipality's Infrastructure, such as the Sewer Treatment Plant and the Well. The rates are reviewed annually to determine if they meet the required debt payment schedule for the upcoming fiscal year. In 2014, amendments were brought forward for the construction of a new sewer line on Poplar Street (2013) and the construction of a new reservoir (2014). A further amendment was brought forward in 2015 to reflect the full year payments for the sewer line and a further amendment will be required in 2016 for the full year payments of the new reservoir.

Revenue Source	% Total Revenue(\$10,708,087) Including Transfers to Other Governments*	% Total Revenue(\$3,062,681) Excluding Transfers to Other Governments
Property Taxes	50.5%	36.6%
Parcel Taxes	3.5%	4.5%
User Fees & Charges	13.0%	16.6%
Grants	18.4%	23.6%
DCCs	0.0%	0.0%
Other Revenues	3.4%	4.4%
Proceeds from Borrowing	5.0%	6.4%
Transfers	6.2%	7.9%
Total	100.0%	100%

*School and Police Taxes were based on the 2016 assessments and 2015 tax rates.

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
82 of 336

**Village of Pemberton
5 Year Financial Plan Bylaw No. 801, 2016
2016 Revenue Policy Disclosure**

2. a) The Provincial Class Multiples are established by the Provincial Government by British Columbia Regulations 426/203 and 439/2003. These rates are used to calculate the tax rates for other government bodies (Collections for Other Governments) with the exception of the Squamish-Lillooet Regional District (SLRD). Both the Village and the SLRD's tax rates are established by the multiples set by Council. Following is a comparison of the two multiples with the variance identified in bold:

Village Multiples	Provincial Multiples
1.00	1.00
3.50	3.50
3.40	3.40
2.25	2.45
1.00	1.00
1.00	1.00

- b) In addition, the Ministry also sets a ceiling for the maximum allowable rate for Class 2 (Utilities). Following is the regulation:

BC Regulation 329/96 defines a rate ceiling for class 02 property for 2000 and subsequent years. The regulation states:

“2. In setting the tax or levy rate for class 2 property for general municipal purposes, a municipality must not exceed the greater of

- a) \$40 for each \$1,000 of assessed value, and
- b) 2.5 times the rate applicable to class 6 property for general municipal purposes in the municipality for the same taxation year.”

The Village falls within this acceptable range.

- c) Furthermore, those properties that were included in the 2011 Boundary Extension (Order in Council No. 165) under Class 2 (*Utility), the tax rate is set each year as per Sections 5 and 6 of the Taxation (Rural Area) Act Regulation, BC Reg. 387/82, and as a result are not included in the table below.

The following table outlines the distribution of taxes between the property tax classes.

Property Class	Village Multiples	% of Total Property Assessment Value (\$439,072,642)	% of Total Property Value Tax (\$1,308,160)
Residential (Class 01)	1.00	83.44%	68.95%
*Utilities (Class 02)	3.50	0.26%	1.26%
Light Industry (Class 05)	3.40	0.56%	1.56%
Business/Commercial (Class 06)	2.25	14.73%	27.39%
Rec/Non-Profit (Class 08)	1.00	0.93%	0.77%
Farm (Class 09)	1.00	0.08%	0.07%
Total		100%	100%

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
83 of 336

**Village of Pemberton
5 Year Financial Plan Bylaw No. 801, 2016
2016 Revenue Policy Disclosure**

3. Following is a list of permissive exemptions granted for the taxation year and the amount of municipal tax revenue forgone:

Municipal Land and Buildings	\$6,591
St. David's United Church (Land only)	313
Pemberton Childcare Society	1,871
Pemberton Lion's Society	2,587
Stewardship Pemberton	465
 Total Municipal Tax Revenue Forgone	 \$11,827

In 2013, Council updated the Permissive Tax Exemption Policy to clarify the criteria, establish timelines for submission and to include an application form which will provide clear guidelines and deliverables for both Staff and the Applicant. Following is the updated Policy and Purpose:

Permissive Tax Exemption Policy:

The Village of Pemberton recognizes the significant value of organizations and groups in our community who provide worthwhile programs and services to our residents

The purpose of this policy is to ensure that the organizations applying for a permissive tax exemption meet the criteria and that the application process is consistent and meets the goals, policies and general operating principles of the Village. The sources of Municipal revenue are limited and a request for an exemption must be considered in concert with other needs of the Village. Council will determine the amount of revenue to be foregone by permissive tax exemptions for non-profit organizations. Council at its sole discretion may grant varying percentages of tax exemptions up to 100% of the tax exemption.

Exemptions are not given to services that are otherwise provided on a private or for profit bases. This would provide an unfair competitive advantage and is not permitted as per Section 25 of the *Community Charter*.

Requests for permissive tax exemptions for organizations whose facilities are outside the boundaries of the Village of Pemberton will not be considered.

Further information, including the complete Policy and Application can be found on the following link on Village website:

http://www.pemberton.ca/media/177127/Permissive_Tax_Exempt_Policy-Jun2013.pdf

Village of Pemberton
5 Year Financial Plan Bylaw No. 801, 2016
Notes to the Village of Pemberton's
Financial Plan

Note 1

General 2016 Assumptions:

1. Municipal tax revenues increased by 2% in 2016 to provide for an allocation to reserves.
2. The percentage change in overall assessments from 2015 to 2016 is 6.20%; which is made up of new construction assessments of 0.88% and 5.32% in market change.
3. Frontage tax is calculated on \$1.37 per meter for water and \$4.32 per meter for sewer. Frontage tax is amended based on the retiring or securing of debt.
4. The Industrial Park Parcel Taxes equal the debt based on the overall costs of the project to install the water infrastructure to the Industrial Park in 2007. Only those properties that did not choose to commute (pay upfront) their cost are levied.
5. User fees for water rates in 2016 will be set as per the Kerr Wood Leidal (KWL) Implementation of Water Rates 2014 – 2019 Report under Alternative 1. This report can be found on the Village website at the following link: <http://www.pemberton.ca/municipal-hall/reports-and-publications/>
6. User fees for sewer have a 0% increase in 2016.

General 2016 – 2019 Assumptions:

1. A 10% Administration Fee will be charged to individual user requests and tasks.
2. General Municipal Property Taxes will be increased for inflation by 2% per year.
3. Operating expenses will be increased for inflation by 2% per year.
4. Water rates will be increased by 7% (see number 3 above), while Sewer Rates will be increased for inflation by 2% per year (pending a Sewer Rate Review).
5. General debt collections, frontage and/or parcel taxes, will equal the general debenture interest and principle payments. This tax is paid by all property owners within the Village of Pemberton who have the ability to connect to the Village's Infrastructure.

**Village of Pemberton
5 Year Financial Plan Bylaw No. 801, 2016
Notes to the Village of Pemberton's
Financial Plan**

Note 2

2016 Capital Projects (\$2,569,485):

Administrative and Financial Services

Community Centre Parcel Tax Expenses (Carryover)	\$9,459
Website	30,000
	\$39,459

Public Works & Parks

Friendship Trail Bridge	\$1,143,490
Streetlight Conversion	35,000
Train Station Roof Repairs	25,000
One Mike Lake Parking Lot Upgrades	8,000
One Mile Lake Boardwalk Upgrades	15,000
	\$1,226,490

Fire Department

New Fire Truck	\$533,536
FireHall Renovations	25,000
	\$558,536

Water

Water Conditioning System	\$625,000
Cedar Lane Water Line Upgrade	20,000
	\$645,000

Airport

Cracksealing	\$100,000
	\$100,000

Total Capital Project Costs 2016	\$2,569,485
	\$2,569,485

VILLAGE OF PEMBERTON

BYLAW No. 802, 2016

A bylaw for the levying of annual tax rates for Municipal, Regional District and Sea to Sky Regional Hospital District and Squamish-Lillooet Regional Hospital District purposes for the year 2016.

The Council of the Village of Pemberton, in open meeting assembled, enacts as follows:

1. The following rates are hereby imposed and levied for the year 2016:
 - (a) For all lawful general purposes of the municipality on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column "A" of Schedule "A" attached hereto and forming a part hereof.
 - (b) For purposes of the Squamish-Lillooet Regional District on the assessed value of land and improvements taxable for general municipal purposes, rates appearing in column "B" of Schedule "A" attached hereto and forming a part hereof.
 - (c) For purposes of the Sea to Sky Regional Hospital District on the assessed value of land and improvements taxable for hospital purposes, rates appearing in column "C" of Schedule "A" attached hereto and forming a part hereof.
2. The minimum amount of taxation upon a parcel of real property shall be One Dollar (\$1.00).
3. This bylaw may be cited as the "Village of Pemberton Annual Tax Rates Bylaw No. 802, 2016."

READ A FIRST TIME this 19th day of April, 2016.

READ A SECOND TIME this 19th day of April, 2016.

READ A THIRD TIME this 19th day of April, 2016.

ADOPTED this ____ day of _____, 2016.

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

**Village of Pemberton
Schedule "A"
Bylaw No. 802, 2016**

2016 Tax Rates

Tax Rates (dollars of tax per \$1,000 taxable value)
--

PROPERTY CLASS	A General Municipal (Includes Reserves, CEF & CIOF)	B Regional District (RD)	C Sea to Sky Regional Hospital District (STSRHD)
1 Residential	2.4617	1.3963	0.0443
2 Utility	14.7705	8.3780	0.1550
5 Light Industry	8.3699	4.7478	0.1505
6 Business/Other	5.5389	3.1418	0.1085
8 Rec/Non-Profit	2.4617	1.3963	0.0443
9 Farm	2.4617	1.3963	0.0443

*The rate for those properties that were included in the 2011 Boundary Extension (Order in Council No. 165) under Class 2 (Utility), is set each year as per Sections 5 and 6 of the Taxation (Rural Area) Act Regulation, BC Reg. 387/82. The rate established for 2016 has not yet been received; the 2015 rate was \$3.82 per \$1,000 of actual value of property.

VILLAGE OF PEMBERTON

BYLAW No. 803, 2016

Water Frontage Tax Amendment Bylaw

**Being a bylaw to amend “The Village of Pemberton Bylaw No. 137, 1979
Amendment Bylaw No. 765, 2014”**

WHEREAS it is deemed expedient and necessary to amend tax on frontage of owners of land by amending Bylaw No. 137, 1979 Amendment Bylaw No. 765, 2014;

NOW THEREFORE, the Council of the Village of Pemberton, in open meeting assembled, enacts as follows:

1. This bylaw may be cited as “Village of Pemberton Bylaw No. 137, 1979 Water Frontage Tax Amendment Bylaw No. 803, 2016.”
2. a. Section 2 of “The Corporation of the Village of Pemberton Bylaw No. 137, 1979” is hereby deleted and the following substituted therefore:
 - b. The annual rate shall be Four Dollars and Thirty Cents (\$4.30) per meter of taxable frontage.

READ A FIRST TIME this 19th day of April, 2016.

READ A SECOND TIME this 19th day of April, 2016.

READ A THIRD TIME this 19th day of April, 2016.

ADOPTED this ____ day of _____, 2016.

Mike Richman
Mayor

Sheena Fraser
Corporate Officer

VILLAGE OF PEMBERTON

BYLAW No. 804, 2016

Sewer Frontage Tax Amendment Bylaw

Being a bylaw to amend “The Village of Pemberton Sewer Frontage Tax Bylaw No. 136, 1979 Amendment Bylaw No. 785, 2015”

WHEREAS it is deemed expedient and necessary to amend tax on frontage of owners of land by amending Bylaw No. 136, 1979 Amendment Bylaw No. 785, 2015,

NOW THEREFORE, the Council of the Village of Pemberton, in open meeting assembled, enacts as follows:

1. This bylaw may be cited as “Village of Pemberton Bylaw No. 136, 1979 Sewer Frontage Amendment Bylaw No. 804, 2016.”
2. Section 3 (b) of “The Corporation of the Village of Pemberton Bylaw No. 136, 1979” is hereby deleted and the following substituted therefore:
 - b. The annual rate shall be Two Dollars and Twenty-Nine Cents (\$2.29) per meter of taxable frontage.

READ A FIRST TIME this 19th day of April, 2016.

READ A SECOND TIME this 19th day of April, 2016.

READ A THIRD TIME this 19th day of April, 2016.

ADOPTED this _____ day of _____, 2016.

Mike Richman
Mayor

Sheena Fraser
Corporate Officer



RECEIVED
APR 05 2016
VILLAGE OF PEMBERTON

March 22, 2016

Attention: Honourable Mayors,
Members of Council and
Chief Administrative Officers

Re: National Public Works Week, May 15-21, 2015 – "Public Works – Always There"

The Public Works Association of British Columbia (PWABC) is seeking your support to recognize and promote National Public Works Week (NPWW) by acknowledging May 15-21, 2016 as National Public Works Week in your community. This year's theme is "Public Works – Always There".

National Public Works Week is observed each year during the third full week of May and this is the 56th year. NPWW calls attention to the importance of public works in community life and seeks to acknowledge the efforts of tens of thousands of men and women in North America who provide and maintain civil infrastructure and services. NPWW also allows Councils to remind the public of the 24/7 services that they are responsible for and are proud of. Many Councils and Public Works departments make this an annual celebration in their communities.

The APWA encourages public works agencies and professionals to take the opportunity to celebrate the week by parades, displays of public works equipment, high school essay contests, open houses, programs for civic organizations and media events. The occasion is marked each year with scores of resolutions and proclamations from Mayors and Premiers and raises the public's awareness of public works issues and increases confidence in public works agencies like yours who are dedicated to improving the quality of life for present and future generations.

For your convenience, I have attached a sample Council proclamation that you may consider using. A digital copy is available on our website www.pwabc.ca as well as further information about this year's theme and resources on making your Public Works Week a success. If you have any further questions or require any additional information, please do not hesitate to contact Jeannette Austin, Executive Director at 250.819.6290. Thank you for making a difference.

Please note that we have a new address and declarations should be forwarded to:

**PWABC
#102 – 211 Columbia ST
Vancouver BC V6A 2R5**

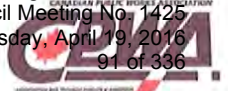
Yours truly,

Deryk Lee, PWABC President



#102 – 211 Columbia ST Vancouver BC V6A 2R5 1.877.356.0699
www.pwabc.ca

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
91 of 336



PROCLAMATION
"Community Begins Here"
PUBLIC WORKS WEEK
MAY 15-21, 2016

WHEREAS: *public works infrastructure, facilities and services are vital to the health, safety and well-being of the residents of (Enter your city/municipality/town/etc name); and*

WHEREAS: *such facilities and services could not be provided without the dedicated efforts of public works professionals, engineers and administrator who are responsible for building, operating and maintaining the public works systems that serve our citizens; and*

WHEREAS: *the Public Works Association instituted Public Works Week as a public education campaign "to inform communities and their leaders on the importance of our nation's public infrastructure and public works services"; and*

WHEREAS: *it is in the public interest of citizens and civic leaders to gain knowledge of the public works needs and programs of their respective communities;*

WHEREAS: *Public Works Week also recognizes the contributions of public works professionals.*

NOW THEREFORE, I, (Enter Mayor's Name), Mayor of the (Enter your city/municipality/town/etc name), do hereby proclaim the week of May 15-21, 2016, as Public Works Week in Enter your municipality.

Dated this day of _____, 2016.

(Enter Mayor's Name), Mayor

DAY OF THE DEVILS

SATURDAY
APRIL 23RD 2016

DONATION REQUEST LETTER

Red Devils Alumni Association Fundraiser to support student participation in High School Sports Programs and Competitions

Participating on a school sports team has become increasingly expensive. The combination of increased travel costs and a decline in government funding has made it difficult for students and their families to be able to afford to participate in school team sports.

There is a tremendous value to the students participating and representing their school and community in team sports, and it is an opportunity that all students should have the possibility of being involved with. Participation generates a sense of belonging, and builds team skills for life.

Ultimately, inclusion of all students striving to represent their school and community, reflects on the wellbeing of the community.

On Saturday, APRIL 23RD 2016, the Red Devils Alumni Association will be hosting the "Day of the Devils" at The Meadows at Pemberton Golf Course and Pemberton Secondary School. We are hopeful that 300+ people will participate in the Golf Tournament, Casino Night, and Dinner / Dance.

How can you help?

We would greatly appreciate any; one time donation, gift, service, certificates or an annual pledge.

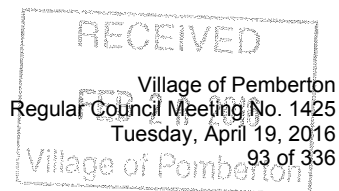
We hope to supply awards for the Golf Tournament & Casino Night, and also conduct a silent auction during the Dinner / Dance. Your donation will receive community exposure and advertising.

Your company name and donation will be included in our social media campaign, on signage at the events and recognised with a thank you in the local newspaper.

For more information please check the website www.reddevilsalumni.com or our facebook page www.facebook.com/pembertonreddevilsalumni

*If you wish to participate, please contact at the email address: pkread@telus.net (Cell 905 9031) or the alumni committee through the website. Association address is **Unit #1 – 7438 Birch Street. Pemberton BC V0N 2K0***

Sincerest thanks. Phill Read





Box 219, 1350 Aster Street
Pemberton, BC V0N 2L0
P. 604-894-6371 TF. 800-298-7753
F. 604-894-6526
info@slrd.bc.ca www.slrd.bc.ca

March 31, 2016

BY EMAIL (sfraser@pemberton.ca)

Village of Pemberton Mayor and Councillors
Box 100
Pemberton, BC
V0N 2L0

Dear Pemberton Mayor and Councillors,

As you may be aware, the Squamish-Lillooet Regional District recently concluded an update to its solid waste management plan. The Solid Waste and Resource Management Plan (SWRMP) will be used as the guiding document for solid waste management in the district for the next ten years. We are currently sending the completed SWRMP to member municipalities and asking for letters of support to accompany the formal submission to the Ministry of Environment (MOE).

Background on the Solid Waste and Resource Management Plan

The SLRD began the solid waste management plan update process in mid-2013 and on March 16, 2016 the SLRD Board officially adopted the SWRMP. Over the past three years the SWRMP has been developed with input from stakeholders throughout the regional district.

In late 2013 the SLRD initiated the establishment of the northern and southern Solid Waste Management Plan Advisory Committees. The Advisory Committees were comprised of affected stakeholders who were included in the development and drafting of the SWRMP. The Village of Pemberton's representatives, involved at various stages of plan development, were Lisa Pedrini, Tim Harris, and James Abrams.

The SWRMP update process consisted of three stages. Stage 1 was completed in April 2014 with the Stage 1 report that outlined the current system of solid waste services and facilities in the SLRD. The Stage 2 report, finalized in March 2015, contained the initiatives, targets, and vision for solid waste management in the SLRD over the next ten years. Upon completion of the draft SWRMP, the public and community consultation phase took place to ensure stakeholders not directly included on the Advisory Committees had the opportunity to provide input on the plan.

Stage 3 took place throughout the summer and fall of 2015. The public component of the consultation phase included a survey and several "Let's Talk Trash" events held across the SLRD. Pemberton's events took place at the Farmer's Market and at the Pemberton Transfer Station. In October of 2015, SLRD staff presented the plan to the Village of Pemberton Council with an opportunity to provide feedback. The results of the public and community consultation phase were incorporated into the final draft of the SWRMP which was completed in January of 2016. The final

version of the plan excluded the option to thermally treat waste when managing residual solid waste, in support of the motions passed by the Whistler, Squamish, and Pemberton Councils.

Solid Waste and Resource Management Plan Summary

The 2016 SWRMP differs from the 2007 solid waste management plan by establishing a greater emphasis on collaboration between the SLRD and member municipalities, community groups, and First Nations, as well as a focus on reducing barriers to behaviour change through effective communication strategies. It also expands upon the adoption of Zero Waste by incorporating Zero Waste principals in all initiatives, goals, and targets.

In addition to the initiatives planned for all areas of the SLRD, the major proposals for users of solid waste services in the Village of Pemberton and Area C include a Re-Build-It Centre and curbside service. The SLRD will work closely with the Village of Pemberton to ensure these initiatives are implemented in an efficient and collaborative manner.

Submission to the Ministry of Environment and Next Steps

The letters of support received from member municipalities will be included in the formal submission to MOE. The SLRD will submit the SWRMP to MOE once all member municipalities have sent us their letters, or indicated that they are not completing one. A templated letter of support has been included with this letter to reduce the amount of your staff time necessary for completion of this task. After the SWRMP has been submitted to MOE the SLRD will be re-establishing the Solid Waste Management Plan Monitoring Committee, and seeking municipal representation, to oversee the implementation of the SWRMP.

Thank you in advance for receiving this letter and we hope that you will submit a letter in support of the SWRMP.

Yours Sincerely,



Jack Crompton,
Chair, Squamish-Lillooet Regional District

Enclosures:
Solid Waste and Resource Management Plan
Letter of Support Template



MORRISON HERSHFIELD

SLRD SOLID WASTE AND RESOURCE MANAGEMENT PLAN



Submitted to:

Squamish-Lillooet Regional District
Box 219, 1350 Aster Street
Pemberton, BC V0N 2L0

Submitted by:

Todd Baker, P.Eng
Senior Environmental Engineer
Morrison Hershfield Ltd.
Suite 310, 4321 Still Creek Drive
Burnaby, BC, V5C 6S7

Email: tbaker@morrisonhershfield.com

Tel: 604-454-0402

Fax: 604-454-0403

16 March, 2016

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016

96 of 336

TABLE of CONTENTS

Page

LETTER OF TRANSMITTAL

GLOSSARY 1

EXECUTIVE SUMMARY 2

1. INTRODUCTION 4

 1.1 LONG TERM VISION 4

 1.2 OBJECTIVES 5

2. PLAN AREA AND DEMOGRAPHICS 6

 2.1 POPULATION 8

3. CHARACTERIZATION OF THE CURRENT WASTE STREAM 9

 3.1 WASTE GENERATION, DIVERSION AND DISPOSAL ESTIMATES 9

 3.2 COMPOSITION OF WASTE DISPOSED 11

4. EXISTING WASTE MANAGEMENT SYSTEM 14

5. A NEW PLAN FOR THE SLRD 17

6. COMMUNICATIONS 18

7. REDUCTION AND REUSE 21

8. WASTE DIVERSION THROUGH POLICY 23

9. EXTENDED PRODUCER RESPONSIBILITY 25

10. RESIDENTIAL WASTE MANAGEMENT 27

11. COMMERCIAL AND MULTI-FAMILY WASTE MANAGEMENT 29

12. ORGANIC WASTE MANAGEMENT 31

13. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT 32

14. LANDCLEARING WASTE MANAGEMENT 33

15. RESIDUAL WASTE MANAGEMENT 34

 15.1 RESOURCE RECOVERY 34

 15.2 DISPOSAL 34

16. ILLEGAL DUMPING 37

17. WILDLIFE AND WASTE MANAGEMENT 38

18. LAND USE PLANNING 39

19. MONITORING OF GREENHOUSE GAS EMISSIONS 40

TABLE of CONTENTS

Page

20. AUTHORITY OVER WASTE MANAGEMENT ACTIVITIES IN THE SLRD	41
21. PLAN IMPLEMENTATION	42
21.1 ESTIMATED DIVERSION	42
21.2 IMPLEMENTATION SCHEDULE AND COSTS	42
21.3 STAFFING IMPLICATIONS	44
21.4 COST RECOVERY	46
22. PLAN TARGETS.....	47
23. MONITORING AND MEASUREMENT	48
23.1 MEASURING PROGRESS	48
23.2 ON-GOING MONITORING AND EVALUATION	49
24. PLAN FLEXIBILITY	50
25. APPROVAL BY THE BOARD.....	51

LIST OF APPENDICES

APPENDIX A: SOLID WASTE AND RESOURCE MANAGEMENT STRATEGIC COMMUNICATIONS PLAN

APPENDIX B: FACILITY AUTHORIZATION PROCESS

APPENDIX C: PLAN MONITORING ADVISORY COMMITTEE TERMS OF REFERENCE

TABLE of CONTENTS

Page

LIST OF TABLES

TABLE 2-1: POPULATION DATA FOR THE SERVICE AREAS WITHIN THE SLRD	8
TABLE 3-1: DISPOSAL AND DIVERSION ESTIMATES (2012)	10
TABLE 3-2: SLRD’S ESTIMATED WASTE COMPOSITION AT FOUR DISPOSAL LOCATIONS SHOWN AS % BY WEIGHT (2012)	11
TABLE 6-1: SUMMARY OF COMMUNICATIONS INITIATIVES	19
TABLE 7-1: SUMMARY OF NEW REDUCTION AND REUSE INITIATIVES	22
TABLE 8-1: SUMMARY OF NEW WASTE DIVERSION POLICY INITIATIVES	24
TABLE 9-1: CURRENT EPR PROGRAMS IN BC	25
TABLE 9-2: SUMMARY OF THE NEW EPR RELATED INITIATIVES	26
TABLE 10-1: RESIDENTIAL WASTE MANAGEMENT INITIATIVES	28
TABLE 11-1: NEW COMMERCIAL AND MULTI-FAMILY WASTE MANAGEMENT INITIATIVES	30
TABLE 12-1: NEW ORGANIC WASTE MANAGEMENT INITIATIVES	31
TABLE 13-1: NEW C&D MANAGEMENT INITIATIVES	32
TABLE 16-1 - SUMMARY OF GARBAGE RECEIVING FACILITIES IN THE SLRD	35
TABLE 16-2: RESIDUAL WASTE INITIATIVES	36
TABLE 17-1: NEW INITIATIVES TO PREVENT ILLEGAL DUMPING	37
TABLE 18-1: NEW WILDLIFE MANAGEMENT INITIATIVE	38
TABLE 21-1: ESTIMATED DIVERSION	42
TABLE 21-2: IMPLEMENTATION SCHEDULE AND ESTIMATED COSTS	42
TABLE 21-3: SLRD STAFFING IMPLICATIONS BY INITIATIVE AND ANNUALLY	44

LIST OF FIGURES

FIGURE 2-1: PLAN AREA	7
FIGURE 3-1: SLRD PER CAPITA WASTE DISPOSED (2001 – 2012)	9
FIGURE 3-2: 2012 ESTIMATED WASTE COMPOSITION SHOWN AS THE PROPORTION OF ORGANICS, RECYCLABLES AND RESIDUAL WASTE (% BY WEIGHT)	12
FIGURE 3-3: WASTE COMPOSITION OF REGIONAL DISTRICT SIMILAR TO THE SLRD	13

GLOSSARY

C&D waste	Waste materials generated at construction, renovation and demolition projects
Disposal	Landfilling
Diversio	Activities that divert waste materials away from disposal as garbage to alternatives such as recycling or composting. Does not include combustion of garbage to product energy.
DOL	District of Lillooet
DOS	District of Squamish
Generation	The sum of all materials discarded that require management as solid waste, including garbage, recycling, and organic waste. Does not include organic waste composted at home.
ICI	Industrial, commercial and institutional (does not include heavy industry)
MOE	BC Ministry of Environment
organic waste/organics	kitchen scraps, food waste, yard and garden waste
RMOW	Resort Municipality of Whistler
SLRD	Squamish-Lillooet Regional District
SWRMP	Solid Waste and Resource Management Plan
Plan	Solid Waste and Resource Management Plan
SWRMP AC	Solid Waste and Resource Management Plan Advisory Committee
VOP	Village of Pemberton

EXECUTIVE SUMMARY

Over the past three years, Squamish-Lillooet Regional District (SLRD) has engaged in a process to update the 2007 Solid Waste and Resource Management Plan (SWRMP or the Plan) to reflect current and future waste management needs. The process to update the Plan was conducted in three stages. The first stage involved reviewing of the current solid waste management system. The second stage involved the assessment and selection of options to address the region's future solid waste management needs. The third and final stage involved community consultation to obtain input on the selected options. This document, the updated SWRMP, reflects the results of that consultation process.

As part of the planning process, a long term vision for solid waste management in the SLRD was established that encompasses the following:

1. The ultimate goal is zero waste – all of our discards are regarded as resources.
2. To the greatest extent possible, these resources are used locally, thereby moving the SLRD towards a closed-loop economy.
3. The system to manage discards is financially self-sustaining. Embedded in this goal is to have the cost to purchase a product include the cost of re-resourcing it at the end of its useful life.
4. Citizens are actively engaged in behaviours that reflect the waste management hierarchy (i.e. reduce before reuse before recycle...).
5. Until we have achieved zero waste, the infrastructure to manage residual waste meets or exceeds provincial guidelines and regulatory requirements.

Waste composition studies indicate that there is still a significant quantity of disposed waste that can be recycled or managed through composting or similar methods. It is estimated that up to 43% of the disposed waste stream is compostable organics, while plastic and paper make up an additional 25% of the landfilled waste stream. The initiatives described in this report target the recyclable and compostable components of the waste stream. Upon full implementation, these initiatives have the potential to reduce the amount of waste sent to landfill from the current estimate of 525 kg per person to 347 kg per person, a reduction of 34%.

The key diversion initiatives in this Plan are:

- a residential food scraps reduction campaign;
- ICI / multi-family communications strategy;
- tourist accommodation communication strategy;
- Re-Build It facilities in Pemberton and Lillooet; and
- curbside collection services in Pemberton and surrounding area.

The other key component of this planning process has been establishing long term residual waste disposal capacity. There is a lack of long term disposal capacity in the region. Whistler currently sends its waste to a privately-owned landfill in Washington State. The District of Squamish landfill is nearing capacity and expansion options are currently under consideration. In the short-term, the District intends to expand the landfill vertically to gain an additional 13-14 years of capacity. A long-term option is to expand the site horizontally; although this option has a number of technical hurdles to overcome. If the horizontal expansion becomes possible, the Squamish Landfill could be designated as a regional landfill and would be able to receive waste from all of the southern corridor communities. A working group of municipal, SLRD and First Nation representatives will be established to collectively consider long term residual waste management options.

The implementation schedule for this Plan is 2016 to 2020. The estimated additional annual operating costs to the SLRD range from \$20,000 to \$55,000, as shown in the table below. Capital expenditures are anticipated for the

establishment of two Re-Build It centres and the provision of new curbside collection services. The capital cost to expand the Squamish Landfill will be the responsibility of the District of Squamish.

Implementation of New Initiatives	2015	2016	2017	2018	2019	2020
Estimated new operating costs	\$ 55,000	\$ 35,500	\$ 50,000	\$ 41,000	\$ 37,000	\$ 20,000

The implementation of the new Plan will be overseen by the Plan Monitoring Advisory Committee. They will report to the SLRD Board on an annual basis on the Plan's progress and effectiveness.



1. INTRODUCTION

In British Columbia, each regional district is mandated by the Provincial Environmental Management Act to develop a Solid Waste and Resource Management Plan that provides a long term vision for solid waste management, including waste diversion and disposal activities. Plans are updated on a regular basis to ensure that the plan reflects the current needs of the regional district, as well as current market conditions, technologies and regulations.

Over the past two years, Squamish-Lillooet Regional District (SLRD) has engaged in a process to update the 2007 Plan to reflect current and future waste management needs. The process to update the Plan was conducted in three stages. The first stage involved reviewing of the current solid waste management system. The Stage 1 Report can be found on SLRD's website.¹

The second stage involved reviewing options to address the region's future solid waste management needs and the selection of preferred management options. The preferred options were presented in a draft version of the Solid Waste and Resource Management Plan (SWRMP or Plan). The third and final stage involved community consultation to obtain input on the options presented in the draft SWRMP.

Two advisory committees, established for both the South (Furry Creek to Pemberton) and the North (Gold Bridge to Lillooet) areas of the region, provided input throughout the planning process. Both advisory committees have public, local government and technical representation and are collectively referred to as the Solid Waste and Resource Management Plan Advisory Committee (SWRMP AC).

As result of the effort provided by the members of the Solid Waste Management Plan Advisory Committee as well as the input received from the community on the draft Plan, this updated SWRMP was finalized. This document provides an update of the 2007 Plan and provides a path forward for the SLRD and member municipalities for managing solid waste.

The planning process and the development of this report have been undertaken in accordance with the BC Ministry of Environment (MoE) document entitled "Guide to the Preparation of Regional Solid Waste Management Plans by Regional District" (BC MoE, 1994) with consideration of the MOE's Solid Waste Management Planning Guideline Intentions Paper (September 2015).

1.1 LONG TERM VISION

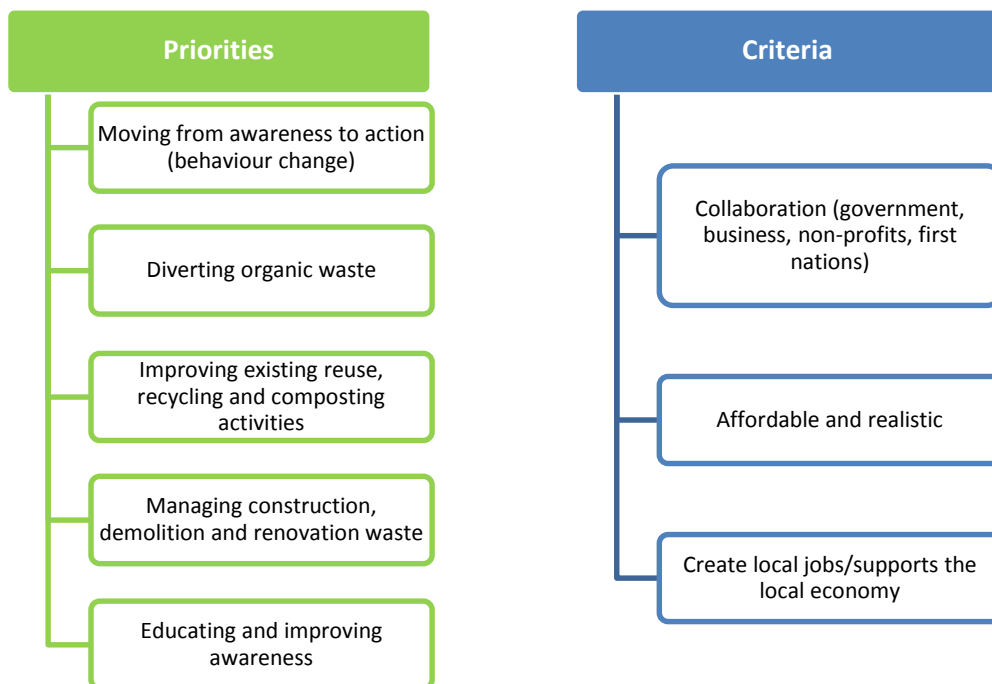
A long-term vision for the SWRMP was developed by the SWRMP AC during Stage 1 of the planning process. The initiatives described in this document are intended to move the SLRD towards this vision:

1. The ultimate goal is zero waste – all of our discards are regarded a resources.
2. To the greatest extent possible, these resources are used locally, thereby moving the SLRD towards a closed-loop economy.
3. The system to manage discards is financially self-sustaining. Embedded in this goal is to have the cost to purchase a product include the cost of managing it at the end of its useful life.
4. Citizens are actively engaged in behaviours that reflect the waste management hierarchy (i.e. reduce before reuse before recycle...).
5. Until we have achieved zero waste, the infrastructure to manage residual waste meets or exceeds provincial guidelines and regulatory requirements.

¹ <http://www.slrd.bc.ca/inside-slrd/current-projects-initiatives/solid-waste-and-resource-management-plan>

1.2 OBJECTIVES

At the initial meeting of the SWRMP AC, an exercise was conducted to help define the priorities (key issues) for the planning process. During this exercise, the committee also identified criteria that they felt are important to include in the consideration of options for managing solid waste. The priorities and criteria are:



2. PLAN AREA AND DEMOGRAPHICS

The plan area shown in Figure 2-1 includes four incorporated municipalities and four unincorporated electoral areas, including:

- District of Squamish (DOS);
- Resort Municipality of Whistler (RMOW);
- Village of Pemberton (VOP);
- District of Lillooet (DOL);
- Electoral Area A (Gold Bridge, Bralorne and area);
- Electoral Area B (Yalakom, Bridge River, Seton/ Tsal'álh, Texas Creek, Fountain Valley, Pavilion);
- Electoral Area C (Pemberton Meadows, Mt. Currie - D'Arcy corridor, Whistler-Pemberton Corridor (excluding municipalities);
- Electoral Area D (Furry Creek, Britannia, Upper Squamish, Upper Cheakamus, Ring Creek, Pinecrest/Black Tusk).

First Nations within in the SLRD include the Xwisten (Bridge River), Tsal'álh (Seton Lake), Sekw'elw'as (Cayoose Creek), T'itq'et (Lillooet), Ts'kw'aylaxw (Pavilion), Xaxli'p (Fountain), N'Quatqua, Lytton, Lil'wat (Mt. Currie), and Squamish peoples. Thirty-six reserves are located in the region, with a total on-reserve population of 3,275 persons in 2011². Lil'wat Reserve 6 has the largest population, with over 1,300 people. Seven other reserves have populations of 100-300 persons. All other reserves have populations of under 100 persons, with the smallest having five or fewer residents.



² Statistics Canada, 2011 Census.



Figure 2-1: Plan Area



2.1 POPULATION

Table 2-1 provides a breakdown of the permanent population of the SLRD for 2011 (based on the 2011 Census) and estimated for 2012 to 2014.

Table 2-1: Population Data for the Service Areas within the SLRD

JURISDICTION	2011 POPULATION DATA	2012 POPULATION DATA	2013 POPULATION DATA	2014 POPULATION DATA
Lillooet	2,324	2,337	2,335	2,344
Pemberton	2,485	2,513	2,579	2,601
Squamish	17,727	18,377	18,789	19,294
Whistler	10,333	10,409	10,194	10,447
Unincorporated Areas	6,644	6,982	6,970	6,810
Squamish-Lillooet TOTAL	39,513	40,618	40,867	41,496

Source: British Columbia Regional District and Municipal Population Estimates
Prepared by: BC Stats, Ministry of Labour, Citizens' Services and Open Government
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>

Whistler receives over two million visitors every year with large seasonal variation in the resident population. Therefore the RMOW calculates an equivalent adjusted population figure to account for the impact of the visiting population on amenities and services. In 2011, the adjusted population number for Whistler was 26,132³, which would increase the overall SLRD population to 55,312 for 2011 (an increase of 40%).

³ Combination of BC Stats and Tourism Whistler equivalent population estimates.

3. CHARACTERIZATION OF THE CURRENT WASTE STREAM

This section provides estimates of the current composition of the SLRD’s waste and the quantity of waste disposed and recycled. Additional information is presented in the Stage 1 report. The data presented in this section is from 2012 and represents the most recent data available when the Stage 1 report was prepared.

3.1 WASTE GENERATION, DIVERSION AND DISPOSAL ESTIMATES

The SLRD has tracked its waste disposal rate for many years. Figure 3-1 shows the per capita quantity of waste disposed in the SLRD from 2001 to 2012. The amount of waste disposed is typically driven by two factors: the range of diversion opportunities, such as recycling and composting, available to the population and the level of regional economic activity. In 2012, the disposal rate was 541 kg per capita.

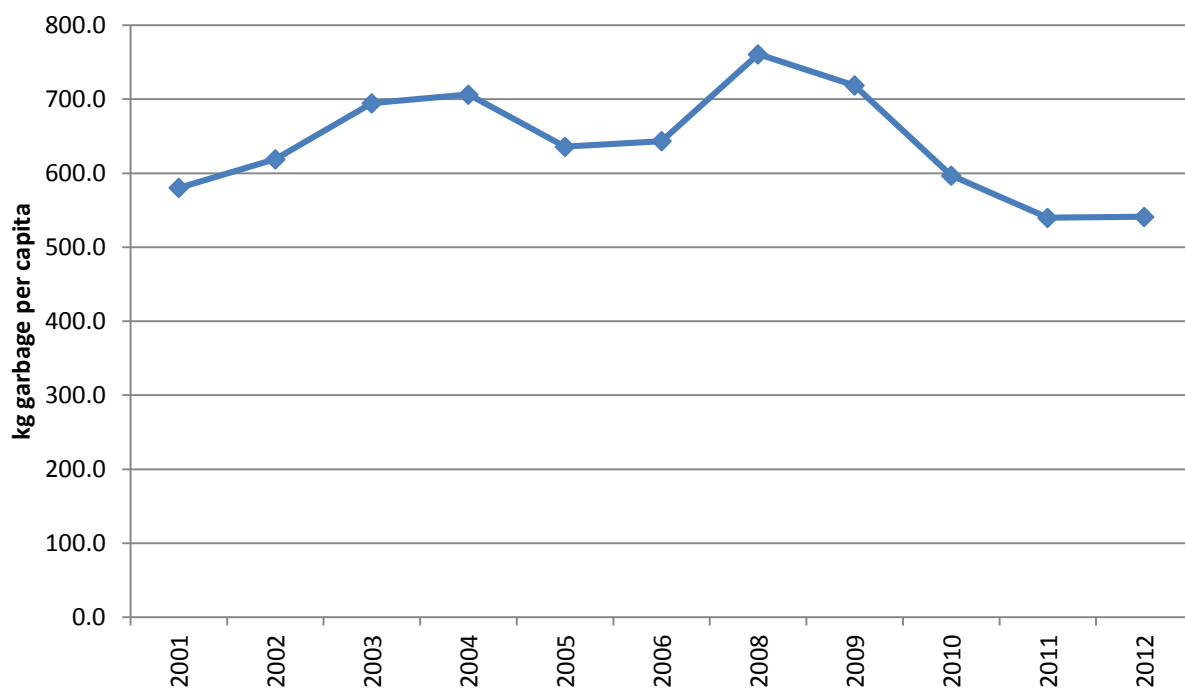


Figure 3-1: SLRD per Capita Waste Disposed (2001 – 2012)

Table 3-1 provides a summary of the estimated waste disposal and waste diversion quantities recorded at the different disposal facilities and for the various methods of diversion. The table presents disposal data for garbage disposed at landfills. The quantities exclude garbage disposed of in landfills on First Nations Reserves (believed to be a relatively small quantity) and biosolids because they are not considered solid waste.

Table 3-1: Disposal and Diversion Estimates (2012)

Disposal and Diversion	Estimated Tonnes (2012)
Disposal	
Squamish Landfill	11,692
Rabanco Regional Landfill via Whistler Transfer Station	12,795
Lillooet Landfill	2,479
Total disposal	26,966
Diversion	
Squamish curbside recycling program	936
Squamish other recycling + composting	5,525
Recycling at Whistler Transfer Station	1,698
Whistler other recycling	5,109
Whistler Composting Facility	2,510
Whistler Re-Use-It Center	309
Whistler Re-Build-It Centre	221
Pemberton Transfer Station Recycling	294
Lillooet Landfill Recycling (includes tonnes from Gold Bridge Transfer Station)	196
Devine Transfer Station Recycling	7
Extended Producer Responsibility Programs (estimated)	3,339
Total diversion	20,144
Total waste generation (disposal + diversion)	47,110
2012 Diversion rate (diversion/waste generation)	43%

The disposal data is based on scale data from SLRD and member municipality disposal facilities. Not all recycling and diversion activities have available data, so the estimated total diversion is considered to be conservative. Based on SLRD's estimated disposal and diversion quantities, the region achieved a diversion rate of 43% in 2012.



3.2 COMPOSITION OF WASTE DISPOSED

The composition of the SLRD landfilled waste is estimated based upon several information sources including a regional waste composition study conducted by Dillon Consulting in 2012 as part of the Regional Composting Feasibility Study⁴ and municipal data available for RMOW.

The purpose of the 2012 regional waste composition study was to estimate the proportion of potentially compostable organic materials in the garbage currently being landfilled. The study separated the garbage into 3 main categories: organics, recyclables, and residual waste. The organics waste stream was further broken down into: backyard compostable food, non-backyard compostable food, yard waste, and non-food organic. Table 3-2 shows the composition of the waste received at four different disposal locations separated by source. Figure 3-2 illustrates how the garbage is broken into the three primary categories (organics, recyclables, and residual waste).

Table 3-2: SLRD's Estimated Waste Composition at Four Disposal Locations shown as % by Weight (2012)

Location	Source	Food - Backyard Compostable	Food -Non Backyard Compostable	Yard Waste	Non Food Organic	Total Organics	Recyclables	Residuals
Squamish	Residential garbage	22	16	12	5	56	13	32
	Mixed Commercial garbage	11	26	0	8	44	24	32
Whistler	Residential garbage	16	14	5	4	39	23	38
	Commercial - Ski Resort Housing garbage	13	13	1	4	31	39	30
	Commercial - Grocery Store garbage	7	47	0	2	56	21	23
Lillooet	Residential garbage	10	11	9	3	34	21	46
	First Nations garbage	16	25	2	6	49	25	25
	Mixed Commercial garbage	11	10	1	5	27	58	15
Gold Bridge	Mixed Residential & Commercial garbage	16	26	2	7	52	21	27

⁴ Dillon Consulting, Regional Composting Feasibility Study, Final Report, July, 2013.



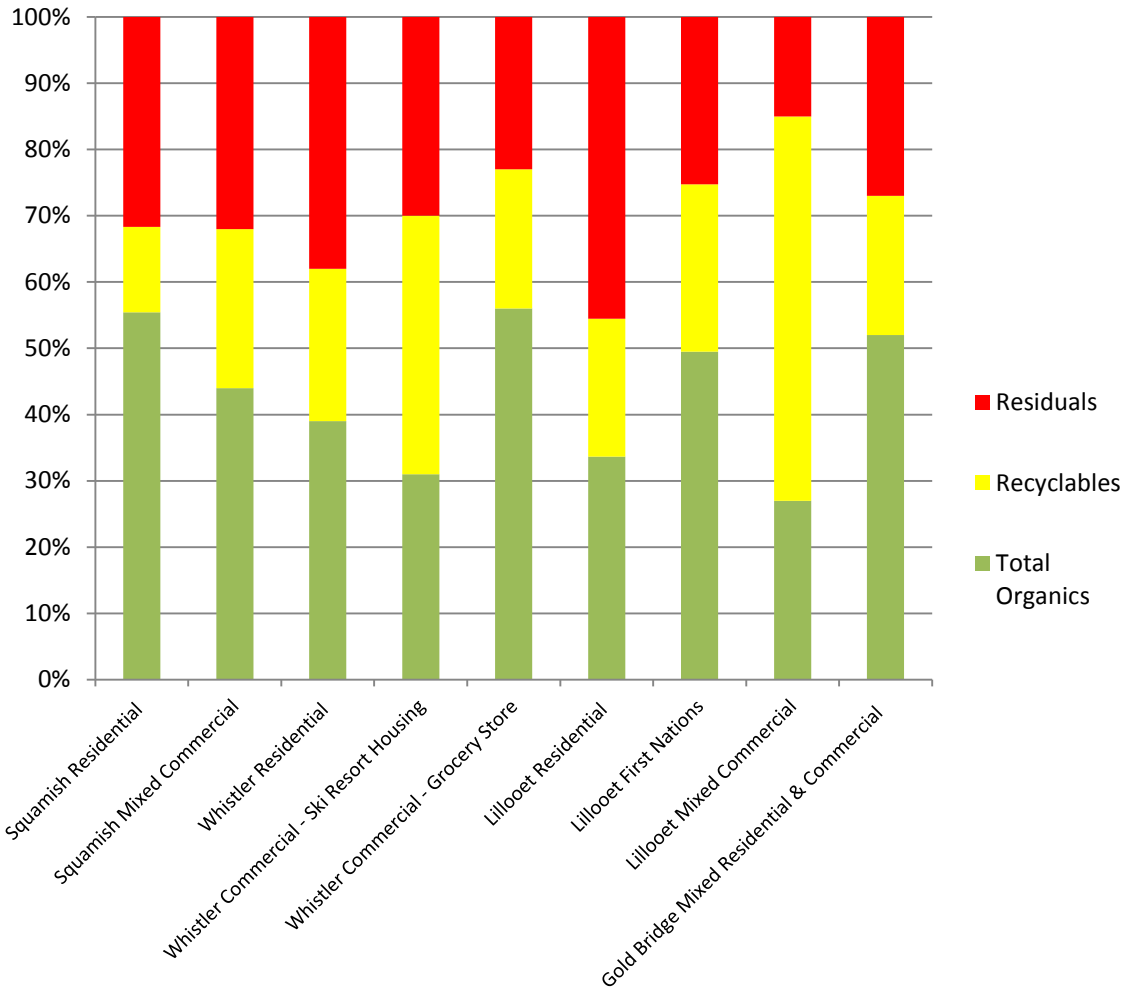


Figure 3-2: 2012 Estimated Waste Composition shown as the Proportion of Organics, Recyclables and Residual Waste (% by Weight)

The largest components disposed, by weight, are organic waste (average of 43% across sources), residual waste (30%) and recyclables (27%). The waste composition results were based on a one-week sort and do not represent seasonal variations in a waste stream.

To obtain additional insight into the potential composition of the waste currently sent to landfill, the results of a 2012 waste composition study conducted for the Regional District of North Okanagan (RDNO) were also considered. The RDNO is a combination of rural areas and smaller towns, similar to SLRD (with the exception of Whistler). As a result, the waste composition data from the RDNO is considered to have reasonable application for the SLRD’s purpose. The RDNO’s study provides a breakdown of the main waste composition categories, as shown in Figure 3-3. The RDNO study indicates that compostable organics constitute the highest percentage of waste landfilled (43%); and plastic and paper constituted the second highest percentage (13% and 12% respectively). Collectively, these three waste categories constituted at least 71 % of the residential waste stream⁵.

⁵ TRI Environmental Consulting Inc., 2012 Solid Waste Composition Study for Regional District of North Okanagan, Village of Pemberton Regular Council Meeting No. 1425 Tuesday, April 19, 2016 11 of 336

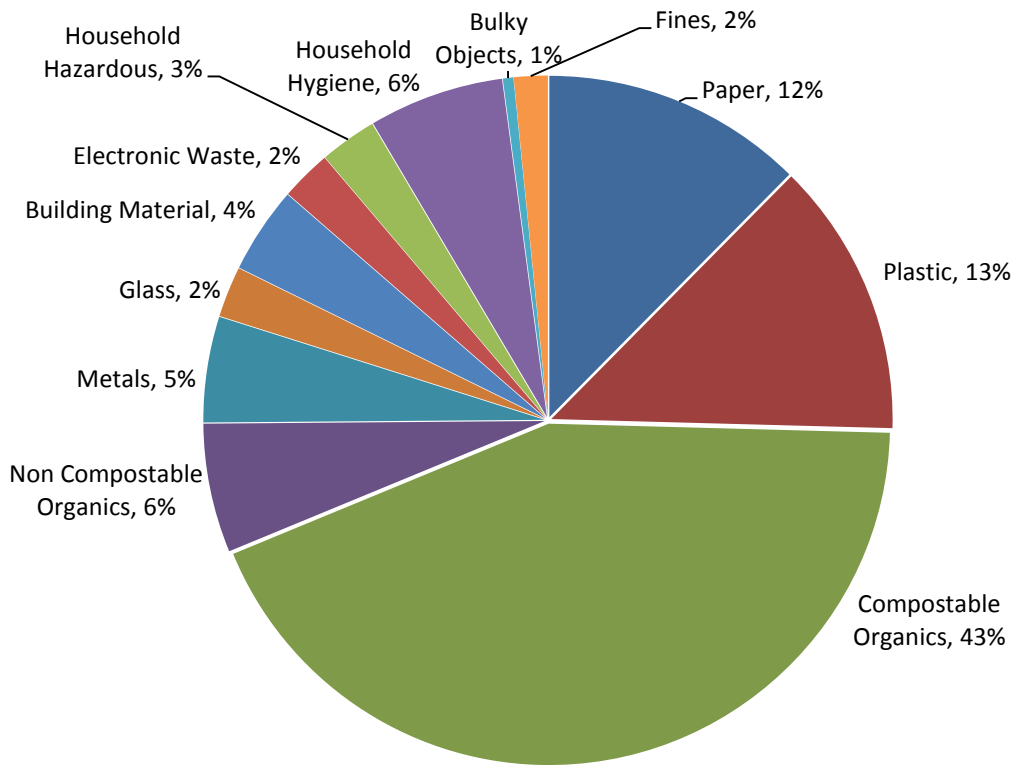


Figure 3-3: Waste Composition of Regional District Similar to the SLRD

3.2.1 RMOW Waste Composition

The RMOW has a unique demographic; it is a tourism community with a fluctuating population. The type and amount of waste produced in the municipality varies with number of visitors throughout the different seasons of the year. RMOW has conducted a variety of waste composition studies in 2004, 2010, 2011, and most recently in 2012. These studies indicated that the largest components of garbage disposed in Whistler are: compostables (25%), paper products (17%), wood waste (16%), plastics (8%) and metal (8%). The RMOW's 2013 Solid Waste Strategy states that 41% of Whistler's garbage could be diverted to the compost facility, and another 40% could be recycled⁶.

⁶ RMOW, Whistler Solid Waste Management Strategy, 2013.



4. EXISTING WASTE MANAGEMENT SYSTEM

The following sections provide a brief outline of the SLRD’s existing solid waste management system. A detailed description of the system is included in the *Solid Waste and Resource Management Plan Stage 1 Report* available on the SLRD website.

Education and Promotion: The SLRD and member municipalities participate in educating residents and businesses about proper waste management. A range of waste management-related promotion and education programs are used to support all solid waste services. The SLRD provides financial support to the Recycling Council of BC (RCBC). RCBC provides a toll-free Recycling Hotline and an on-line searchable database called “Recyclepedia” that provides residents with information on waste management programs in the region.

In addition to the SLRD’s initiatives, private and non-profit organizations in the region also engage in education and promotion activities to increase waste diversion.

Reduction and Reuse Programs: Across the SLRD communities there are several reduction efforts targeting edible unwanted food, the use of plastic bags, bottled water, and encouraging green purchasing and green building. Free stores are operated at the Pemberton, Gold Bridge and Devine transfer stations, as well as at the Lillooet landfill. There are also a number of commercial and non-profit stores in the region focused on reuse, repair or rental of equipment.

Extended Producer Responsibility Programs: The SLRD is a member of the BC Product Stewardship Council, a body that advocates on behalf of local government for effective product stewardship programs. SLRD staff has also engaged in consultation and discussions with stewardship programs in their plan development process. A wide range of EPR products are collected and recovered under the regulated programs. In addition, there are also voluntary programs operating in the SLRD, targeting things like bike tubes, obsolete agricultural pesticide, fridges, and old vehicles.

Back Yard Composting: The SLRD operated a residential composter distribution program, however this program ended due to lack of participation and the availability of composters at local retailers. Backyard composting is not widely encouraged in the SLRD due to concerns with attracting bears into residential areas. Some municipalities have addressed the issue in their bylaws.



Recyclables Collection: Curbside recycling collection is provided to single-family homes in Squamish, Furry Creek, Britannia Beach and on Squamish Nation’s reserve lands. For residents in the rest of the SLRD, there are recycling, drop off facilities available in Squamish, Whistler, Pemberton, Lillooet, Devine and Gold Bridge.

In Squamish, Pemberton and Whistler, owners of multi-family buildings and industrial, commercial and



institutional (ICI) buildings can arrange for recycling collection via private collection service providers.

Compost Collection: Squamish residents receive seasonal curbside yard waste collection. Drop off facilities (available all year around) are available for yard waste in Squamish, Whistler, Pemberton and Lillooet. Britannia Beach and Furry Creek have seasonal drop off sites for yard waste. The ICI sector and multi-family buildings can arrange for their private collection service providers to collect organics in Squamish, Pemberton and Whistler.

Garbage collection: Curbside garbage collection is currently provided to residents in Squamish (municipal service), Lillooet (municipal service), Furry Creek and Britannia Beach (SLRD service), and on Squamish Nation reserve lands (Squamish Nation service). Private collection companies are available to provide residential garbage collection service on a subscription basis in Pemberton, Pinecrest and Whistler. Residents in other communities in the region and in rural areas self-haul their garbage to a transfer station, landfill or Whistler depot.

In Squamish, Pemberton, Whistler and Lillooet, multi-family and ICI buildings must hire a private garbage collection service.

Processing facilities for recyclables and compost: There are two Materials Recovery Facilities (MRFs) in the SLRD for sorting, processing and marketing of recyclables. The SLRD owns one at the Lillooet Landfill, which is operated by a private contractor. The other MRF is privately owned in Squamish.

There are two composting facilities located within the Region; a municipal facility in Whistler and a privately owned facility in Pemberton (Sea-to-Sky Soils). The SLRD recently established a yard waste composting capacity at the Lillooet Landfill.

Construction, demolition and land clearing waste management: Efforts have been made to encourage separation of the reusable and recyclable portions of construction and demolition (C&D) waste generated in the region. There are two C&D waste sorting and processing areas: one next to the Squamish Landfill, and the other at the Whistler Transfer Station. Source separation is encouraged through differential tipping fees charged at Squamish Landfill, Whistler Transfer Station, Lillooet Landfill and Gold Bridge Transfer Station.

Clean wood waste (i.e. untreated wood) is accepted at the Whistler Transfer Station, the Squamish Landfill and the Lillooet Landfill, where it is chipped for use in composting.

Source-separated scrap metal, cardboard and gypsum are collected and stored for recycling at all local government solid waste facilities in the SLRD (Lillooet, Pemberton, Squamish, and Whistler).

Land-clearing waste refers to tree waste, including trunks and stumps that are generated as a result of clearing land for development. In the SLRD, land-clearing waste is generally managed by grinding wood waste to incorporate into the soil, or for other uses such as composting or hog fuel.



Recovery and Residual Waste Management: Resource recovery means the extraction and utilization of materials and energy from the waste stream. None of the landfills within the Region are capturing landfill gas for energy recovery. Whistler's composting facility is recovering waste heat from the composting process and it is used to heat the compost operations building. Whistler is currently investigating the business case for producing biofuel from its current composting operation as a product for sale in addition, or as an alternative to, compost, which is the current saleable product.

Residual waste is the portion of the solid waste stream that is not managed through recycling, composting and/or recovery activities. It is commonly referred to as “garbage”.

There are four publicly owned transfer stations operating in the region; the Whistler, Pemberton, Devine and Gold Bridge transfer stations. In addition, there are two depots located in Whistler, where residential garbage can be dropped off at no cost.

There are two operating landfills in the SLRD, the Squamish Landfill and the Lillooet Landfill. The planned closure date for the Squamish Landfill is 2018⁷, however there is potential to expand the site to accommodate for waste disposal until 2059⁸. Since the closure of the Whistler Landfill, garbage from the Whistler transfer station and depots has been compacted and transported to Roosevelt Regional Landfill (also known as Rabanco) in Washington State, US.

First Nations are responsible for providing their own waste management systems, as regulated under the federal *Indian Reserve Waste Disposal Regulations*. In the SLRD, some communities have their own landfills, while others contract with commercially available collection and disposal services or they self-haul to SLRD or municipal facilities.

⁷ Conestoga Rovers Associates, Lifespan Analysis Update - District of Squamish Landfill, 2013.

⁸ Sperling Hansen Associates, Squamish Landfill Lifespan Analysis and Recommended Operational Improvements, 2011. Village of Pemberton Regular Council Meeting No. 1425 Tuesday, April 19, 2016

5. A NEW PLAN FOR THE SLRD

The components of the new plan focus on:

- Improving communication and collaboration. The new plan incorporates the recommendations of the SLRD Solid Waste and Resource Management Strategic Communications Plan that was approved by the SLRD Board in October 2014;
- Improving the use of existing recycling and composting services;
- Putting more emphasis on reduction (i.e. not creating waste that needs to be “managed”); and
- Identifying the process to establish long-term disposal capacity for District of Squamish, as well as the communities that use the DOS landfill for disposal.

The sections of the Plan are presented as follows:

- Communications
- Reduction and reuse
- Extended producer responsibility
- Waste diversion through policy
- Residential waste management
- Commercial and multi-family waste management
- Organic waste management
- Construction and demolition waste management
- Landclearing waste management
- Resource recovery
- Residual waste management
- Illegal dumping
- Wildlife and waste management
- Land use planning
- Monitoring of Greenhouse Gas Emissions
- Authority over waste management activities in the SLRD
- Plan Implementation
- Plan targets
- Monitoring and measurement
- Plan flexibility

A summary of the new initiatives is presented at the end of each section. For each new initiative, the summary table includes information under the following headings:

- Responsibility – indicating which organization(s) will be responsible to implement the initiative;
- Implementation – indicating the year(s) in which the initiative will be implemented;
- Estimated staffing requirements – indicating the estimated hours of SLRD staff time on an annual basis that the initiative will require;
- Estimated capital cost – referring to estimated SLRD capital expenditure requirements; and
- Estimated operating cost – referring to estimated SLRD operating expenditure requirements.

6. COMMUNICATIONS

During the first stage of this planning process, the top priorities for updating the Solid Waste and Resource Management Plan were identified. Some of these priorities relate to communications, specifically:

- Moving from awareness to action (behaviour change)
- Improving on existing reuse, recycling and composting activities
- Educating and improving awareness.

Consequently, many of the new initiatives in this plan are focused on communications. In October 2014, the Regional Board approved the Solid Waste and Resource Management Strategic Communications Plan prepared by Ecoinspire. The Strategic Communications Plan is intended to meet the waste reduction and diversion communications needs of the SLRD over the next five years by:

- Building on existing organizational objectives and strengths of the SLRD and partner organizations;
- Providing a unifying brand that harmonizes waste reduction efforts across the region;
- Focusing on proven audience-focused social marketing technique and behavioral change science;
- Identifying specific belief, behavior, and knowledge objectives, and a practical action plan to achieve them; and
- Creating an approach that can be replicated to solve other social, environmental or economic challenges.

The Strategic Communications Plan provides detailed information on the process and mechanisms for developing and implementing a successful communications plan and is included in Appendix A for reference. Implementing the Strategic Communications Plan will ensure that the waste reduction and diversion goals identified in the SLRD SWRMP (current and updated versions), as well as the waste reduction and diversion goals of member municipalities, are achieved sooner and with longer lasting effects.

Communication and education are critical support mechanisms to successful waste diversion. The SLRD already provides 20 workshops per year to schools throughout the SLRD and conducts an Earth Day event. Additionally, the SLRD has provided funding to AWARE's Zero Waste Station at the Whistler Farmers Market and there is on-line information provided by the SLRD, member municipalities, recycling collection companies and local environmental organizations.

To enhance current communication initiatives, improve on waste diversion programs and support new diversion actions, the following communications initiatives are planned:

1. The SLRD and member municipalities incorporate community based social marketing (CBSM) into solid waste management endeavors with a significant focus on behaviour change. CBSM is an approach to program promotion and education that encourages high rates of effective participation and long-term behavior change. As outlined in the Strategic Communications Plan, a CBSM plan should include 6 strategic phases (refer to Appendix A for details on each of these phases):
 - Analysis
 - Strategy development
 - Program and communication design
 - Pretesting
 - Implementation
 - Evaluation

2. Develop a Communications Strategy focused on reducing food scraps in waste from single-family homes. This will be the first communications strategy developed under the new SWRMP. The approach and tools used in this strategy are intended to be used for future strategies. It is anticipated that these campaigns could be a collaborative effort by SLRD, Squamish, Whistler, Pemberton, Lillooet, First Nations, and possibly other stakeholders.
3. Establish a mechanism for sharing, standardizing and coordinating communication and education efforts amongst organizations involved in providing waste management services, such as an annual strategic communications planning session. The SLRD would facilitate this collaboration of Squamish, Whistler, Pemberton, Lillooet, First Nations, and other stakeholders as appropriate. Through doing so, the desired outcomes can be harmonized and efficiencies improved.
4. Implement the logo and tagline “Love this place. Reduce your waste” developed for SLRD solid waste communications (part of the Communication Strategy).
5. Develop a communications strategy for ICI and multi-family properties to improve the performance of recycling and organic waste diversion.
6. Develop a communications strategy for tourist accommodations to improve the performance of recycling and organic waste diversion.
7. Coordinate local government efforts to establish internal zero waste programs, so that the SLRD and member municipalities can lead by example. See the ICI and Multi-family section for more information on this initiative.
8. Expand the SLRD’s zero waste workshops beyond schools to other public venues.
9. Encourage and support “bear smart” backyard composting.
10. Increase public awareness of EPR take back programs available in the SLRD.
11. Promote construction and demolition waste reuse and recycling opportunities.

Love this place. Reduce your waste.



Table 6-1 below summarizes the new communication initiatives and resource requirements such as staffing and financial implications. An initiative not listed below indicates that there are no anticipated resource requirements.

Table 6-1: Summary of Communications initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Incorporate community-based social marketing into major campaigns	SLRD, municipalities	2015 onwards	included under individual initiatives	included under individual initiatives	included under individual initiatives
Residential food scraps reduction campaign	SLRD, municipalities	2015-2017	1000	\$ -	\$ 66,000 over 3 yrs
ICI and multi-family communication strategy	SLRD, municipalities	2017-2018	1000	\$ -	\$ 30,000 over 2 yrs
Tourist accommodation communication strategy	Whistler, Squamish	2019-2020	500	\$ -	\$ 20,000 over 2 yrs

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Construction & demolition communication strategy	SLRD, municipalities	2019-2020	500	\$ -	\$ 15,000 over 2 yrs
Coordination of local governments' internal zero waste initiatives	SLRD, municipalities	2015 -2016	40	\$ 0	\$ 1000 over 2 yrs
Expansion of zero waste workshops	SLRD, municipalities	2015 onwards	0	\$ -	\$ 5,000 annually
Bear Smart backyard composting	SLRD, municipalities	2015 onwards	20	\$ -	\$ 1,000 every 3 rd year
EPR awareness	SLRD, municipalities	2015 onwards	20	\$ -	\$ 1,000 every 3 rd year
Promote local construction and demolition waste reuse/recycling opportunities	SLRD, municipalities	2015 onwards	40	\$ -	\$ 1,000 every 3 rd year



7. REDUCTION AND REUSE

Reduction and reuse initiatives prevent waste from entering the waste management system resulting in conservation of resources. Although reduction and reuse initiatives are at the top of the waste management hierarchy, historically solid waste management strategies have not focused on these initiatives. As noted in the previous sections, one of the priorities for this planning process is improving on existing reuse, recycling and composting activities.

Real change will ultimately have to be driven from the consumer level. This can be driven by consumer demand for more durable goods, and also through increased consciousness regarding what and how much we consume. The SLRD and member municipalities can support a change in mindset through encouraging the reuse of goods before they become waste. This is currently being done through:

- Whistler's Reuse It and Rebuild It Centres
- Squamish's Reuse It Fair
- Free stores at the all SLRD transfer stations (Pemberton, Gold Bridge, Devine) and the Lillooet Landfill

In addition, there are other reuse opportunities in the SLRD available through non-profit initiatives such as Squamish ReBuild and Pemberton Re-Use-It, consignment and thrift stores, on-line services such as Facebook, Craigslist and Kijiji, and many rental, repair and maintenance shops.

The SLRD and member municipalities will be able to promote the "reduce and reuse" mindset shift through undertaking the following activities:

1. Develop campaigns to encourage reduction and reuse behavior. These campaigns are discussed in the Communications section. The initial focus would be on reducing the amount of food scraps in residential waste.
2. Establish a Re-Build-It Centre type of facility in Pemberton where usable construction, demolition and renovation discards can be stored for reuse.
3. Establish a Re-Build-It Centre type of facility at Lillooet Landfill.
4. Encourage bear smart backyard composting.
5. Establish a fund to foster local zero waste initiatives that would be administered by the SLRD. It is anticipated that applications for funding would be received and reviewed on an annual basis by the Plan Monitoring Advisory Committee (see Section 23 for additional information on this committee). The committee would collaborate on establishing criteria for eligibility for funding.

Table 7-1 below summarizes the new reduction and reuse initiatives and their associated resource requirements such as staffing and finances. Resource requirements for bear smart composting have been included under Communications.

Table 7-1: Summary of new reduction and reuse initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Campaigns to encourage reduction and reuse behavior	Incorporated into Communication Initiatives				
Re-Build-It Centre type of facility in Pemberton	SLRD, Pemberton	2017	40	\$ -	to be determined
Re-Build-It Centre type of facility at Lillooet Landfill	SLRD	2018	60	\$ 15,000	to be determined
Bear smart backyard composting	Incorporated into Communication Initiatives				
Fund for local zero waste initiatives	SLRD	2017	15	\$ -	\$ 5,000 annually



8. WASTE DIVERSION THROUGH POLICY

Two policy approaches to encouraging diversion were explored during this planning process: variable tipping fees and disposal bans.

Variable tipping fees refers to the application of different disposal rates for different types of waste at landfills and transfer stations. For example, in the SLRD, tipping fees on recyclable and compostable materials are generally lower than the tipping fee for garbage. Additionally, loads of garbage that contain an excessive amount of recyclables can be charged a tipping fee higher than the one for regular garbage. Variable tipping fees act as a financial incentive to source-separate these types of materials from the regular garbage. This is particularly effective for businesses and construction/demolition projects.

Although variable tipping fees are in effect throughout the SLRD, how they are applied varies from facility to facility. The SLRD and member municipalities aim to use variable tipping fees to target the same waste types for source-separation (based on the availability of local alternatives) so that the policy is more consistent throughout the region. Waste types that could be considered include:

- Cardboard
- Metal
- Yard waste
- Food waste
- Clean wood waste
- Drywall
- Products covered under an Extended Producer Responsibility (EPR) program

A similar policy approach involves banning specific materials from disposal. Disposal bans are typically implemented using a bylaw that specifies which waste materials must be collected separately from garbage for the purpose of recycling or composting. Bans are also used to prohibit hazardous materials from entering landfills. They are enforced at the point where garbage is deposited at a landfill or transfer station and non-compliance with the bylaw results in the deliverer of the garbage being ticketed or having a surcharge placed on the tipping fee.

Disposal bans, which are not currently a policy tool used by in the SLRD, will only be implemented if variable tipping fees are not as effective at achieving the desired diversion behaviours. Some exceptions are anticipated when a specific waste stream is determined to warrant the establishment of a disposal ban prior to determining if variable tipping fees would be effective. To this end, it is also planned that landfill bans on most EPR products be established when and where local collection services are available for those products. The specific list of EPR products to be banned from garbage will be determined through collaborative dialogue between SLRD and the municipalities of Squamish and Whistler. This initiative is discussed further in the next section on EPR (Section 9).

Creating greater consistency in terms of disposal policies throughout the southern part of the SLRD will require that local government representatives meet on a regular basis (at least annually) to review existing policies and consider opportunities to enhance the effectiveness of their policies. Table 8-1 lists the new policy initiatives and their implications.

Table 8-1: Summary of new waste diversion policy initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Establish regionally consistent tipping fee categories	SLRD, Whistler, Squamish. Coordinated by SLRD.	2016	10 hrs annually for collaboration and revisions to tipping fee schedule	\$ -	\$ -



9. EXTENDED PRODUCER RESPONSIBILITY

Use of Extended Producer Responsibility (EPR) as a policy tool aims to shift the responsibility for end-of-life management of products (physically and economically) to the producer and away from municipalities to create an incentive for producers to include environmental considerations in design of products. EPR programs in BC are mandated by Recycling Regulation 449/2004, under the Environmental Management Act. The regulation requires producers of the designated products to develop a program for their collection and recovery of materials and to consult stakeholders (including local governments) when developing their plans. The Ministry of Environment, who is responsible for the regulation, requires the product stewards to file annual reports on the materials collected and recovered, and to breakdown collection volumes by regional district where possible.

Table 9-1 lists the current EPR programs in BC. Most of these programs operated “take back” programs where consumers can return the used product to a depot or to the retailers. In the SLRD, several EPR programs have arranged for municipal and SLRD landfills and transfer stations to operate as take-back depots. It is planned that local governments continue to provide EPR take-back services, as needed, to ensure local access to these programs by residents. Local government participation may be dependent on the level of cost recovery that is offered by the EPR program to the SLRD or member municipality to provide the service.

Table 9-1: Current EPR programs in BC

PRODUCT CATEGORY	PROGRAM(S)
Antifreeze, Used Lubricating Oil, Filters and Containers	BC Used Oil Management Association
Beverage Containers	Encorp (non-alcoholic and wine, spirits, coolers and import beer in non-refillable containers) Brewers Distributed Limited (fillable and canned beer)
Electronics and Electrical	Call2Recycle (batteries and cell phones) Canadian Wireless and Telecommunications Association (CWTA) (batteries and cell phones) Electronics Products Recycling Association (EPRA) (electronics: Computers, televisions, audio-visual, medical equipment, office equipment) LightRecycle (lamps and lighting equipment) Major Appliance Recycling Roundtable (MARR) (large appliances) Outdoor Power Equipment Institute (OPEI) (Outdoor Power Equipment) Canadian Electric Stewardship Association (CESA) (small appliances, power tools, sports and exercise equipment, hobby, craft) AlarmRecycle (smoke and carbon monoxide alarms) Switch the 'Stat (thermostats) Canadian Brandowner Residual Stewardship Corporation (toys –electric and electronic)
Lead Acid Batteries	Canadian Battery Association Interstate Battery System
Packaging and Printed Paper (residential)	Multi-Material BC
Paint and Solvents and Flammable Liquids, Gasoline and Pesticides	Product Care
Pharmaceuticals	Health Product Stewardship Association
Tires	Tire Stewardship BC

The SLRD is a member of the BC Product Stewardship Council (BCPSC), a body that advocates on behalf of local government for effective product stewardship programs. As a member of BCPSC, it is planned that SLRD:

- Liaise with member municipalities to share information on the outcomes of the BCPSC meetings and provide information on other EPR-related initiatives.
- Encourage BCPSC to invite First Nations to participate on the Council.

SLRD staff also engage in consultation with stewardship programs in their plan development process, and advocates that these programs provide reasonable service levels for the SLRD.

To reinforce that EPR products are a private sector responsibility and they should not be landfilled in the SLRD, specific EPR products should be added to the list of materials that are banned from disposal as garbage. This ban should be implemented at landfills and transfer stations only when a take-back program for the targeted EPR products is locally available. A list of EPR products that could be banned from landfilling includes:

- Lead-acid batteries
- Appliances
- Paints and solvents
- Pesticides
- Household batteries – single use and rechargeable
- Electronics
- Motor oil and filters
- Pharmaceuticals
- Tires

During the planning process, it was noted that more awareness of the breadth of EPR programs and drop off locations is needed. SLRD and municipal staff intend to work with the product stewardships organizations to support increased awareness throughout the SLRD as part of the overall Communications strategy discussed in Section 6.

Table 9-2 below summarizes the new EPR related initiatives and their associated resource requirements such as staffing and finances.

Table 9-2: Summary of the new EPR related initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Landfill bans on specified EPR materials/products	SLRD, Squamish, Whistler	2016	40 hrs for bylaw revision and communications	\$ -	\$ -
Increase awareness of EPR programs and services	Incorporated into Communication Initiatives				

10. RESIDENTIAL WASTE MANAGEMENT

This section describes collection services provided by local government to residents, including the collection of garbage, recyclables and compostable waste. Residential services *currently* provided in the SLRD include:

District of Squamish	Door-to-door collection of garbage, recycling and seasonal yard waste (curbside food waste to be collected with yard waste starting in 2015)
Resort Municipality of Whistler	Depot-based collection of garbage, recycling and food waste
District of Lillooet	Door-to-door collection of garbage
SLRD	Door-to-door collection of garbage and recycling in Britannia and Furry Creek Drop off facilities for seasonal collection of yard waste in Britannia and Furry Creek Depot-based collection of garbage, recycling and food waste in Pemberton Depot-based collection of garbage, recycling and yard waste in Lillooet Depot-based collection of garbage and recycling for Electoral Areas A, B and C

Note that the services above do not include collection services for multi-family buildings. For the purposes of waste collection, multi-family buildings are treated as commercial buildings. Refer to Section 11 for a list of actions related to commercial and multi-family buildings.

In addition to maintaining the current residential waste collection system, the following initiatives are planned:

- Implement curbside collection services in Pemberton and surrounding area. This process will begin with community consultation to determine the community's support for a collection service, the possible breadth of the service (garbage and/or recycling and/or organic waste collection) and the collection protocols (e.g. types of collection containers, frequency of collection). If there is support for a curbside service, it is expected that the service requirements for the Pemberton transfer station may be reduced and that there will be costs savings associated with operating the transfer station.
- Assess the provision of curbside recycling and yard waste collection services in Lillooet. District of Lillooet intends to undertake an assessment of the cost-benefit of adding curbside recycling and yard waste collection to their existing curbside collection service (currently for garbage only). One of the considerations for implementing this service may be the availability of funding for the recycling service through Multi-Material BC or other producer responsibility organization.

These initiatives are intended to achieve following objectives:

- To reduce the amount of residential garbage sent to landfill
- To provide services and incentives that encourage diversion of recyclable and compostable discards

Table 10-1 below summarizes the new residential waste initiatives and their associated resource requirements such as staffing and finances.

Table 10-1: Residential Waste Management Initiatives

NEW RESIDENTIAL INITIATIVES	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Curbside collection services in Pemberton and surrounding area					
a. Community consultation	SLRD and Pemberton	2015	80	\$ -	\$ 2,500
b. Implementation	SLRD or Pemberton	2016	150	\$ -	\$ 10,000
c. On-going collection service	SLRD or Pemberton	2017	40	to be determined	to be determined
Assess provision of curbside recycling and / or yard waste collection services in Lillooet	Lillooet	2016	20	\$ -	\$ -



11. COMMERCIAL AND MULTI-FAMILY WASTE MANAGEMENT

Throughout the SLRD, private collection companies are contracted to collect their garbage, recycling and organic waste from commercial, institutional and multi-family residential buildings. During Stage 1 of the planning process, it was noted that in communities where recycling and organic waste collection services are offered, not all businesses and multi-family buildings subscribe to these services. Waste composition data presented in the Stage 1 report indicates the 24% of Squamish's commercial garbage is recyclable, 39% of Whistler's ski resort accommodation garbage is recyclable, and 21% of commercial grocery store garbage is recyclable. This data indicates that there is a significant opportunity to increase diversion by improving the use of existing recycling services.

Current local government approaches to encouraging recycling and composting in commercial and multi-family settings include:

- Variable tipping fees at disposal facilities in Squamish, Whistler and the SLRD to encourage source-separation and diversion (discussed in Section 8);
- Allowing small multi-family waste generators in Squamish to participate in the residential curbside collection service on a voluntary basis; and
- Implementing a bylaw in Whistler that makes recycling and organics collection from all multi-family and commercial buildings mandatory (the collection service will continue to be provided by private waste collection companies).

In addition to these approaches, the following initiatives are planned:

1. Develop a communications plan for the multi-family residential and commercial sectors to increase diversion of recyclable and compostable waste. This initiative is part of the Communication strategy described in Section 6. Possible initiatives to be considered include:
 - Implementation of a bylaw similar to Whistler's mandatory bylaw in other areas of the SLRD.
 - Like Squamish, allow small multi-family and commercial waste generators to participate in residential curbside recycling and organic waste collection service, where these services exist.
2. Improve recycling at tourist accommodations. This initiative would require the development of a communications strategy using community-based social marketing principles and is incorporated into the Communications initiatives described in Section 6.
3. Improve recycling and waste minimization at events. This initiative would include the development of common Event Guidelines that could be used as a template by local governments in the SLRD, as well as requiring the organizers of large events to submit a Solid Waste and Resource Management Plan for large events.
4. Require new multi-family and commercial developments (and significant re-developments and renovations) to design for 3 stream waste management (garbage, recycling, composting) storage and collection. The SLRD can coordinate the development of model bylaw language that could be used by the municipalities and would allow for greater consistency across the region.
5. Local governments should provide leadership to the ICI sector lead by working together to implement internal zero waste initiatives and procurement policies that support the waste minimization and diversion. This collaborative effort will be coordinated by the SLRD and is considered to be part of the broader communications strategy described in Section 6.

These initiatives are intended to meet the following objectives:

- Moving from awareness to action (behaviour change)
- Increasing the diversion of organic waste
- Improving on existing reuse, recycling and composting activities.

Table 11-1 below summarizes the new commercial and multi-family initiatives and resource requirements such as staffing and financial implications.

Table 11-1: New Commercial and Multi-Family Waste Management Initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Commercial and multi-family communications plan	Incorporated into Communication Initiatives				
Improve recycling at tourist accommodations	Incorporated into Communication Initiatives				
Recycling and waste minimization at events	SLRD, municipalities. Coordinated by Whistler.	2016 - ongoing	20 to coordinate in Yr 1. 10 hrs/yr for each local government to implement and maintain	\$ -	\$ 1,000
Require new developments to design for 3 stream waste management	SLRD, municipalities. SLRD to coordinate.	2016 - ongoing	40 hrs to coordinate in Yr 1. 20 hrs for each local government to implement	\$ -	\$ 2,000
Local government leadership	Incorporated into Communication Initiatives				



12. ORGANIC WASTE MANAGEMENT

There has already been significant investment in organics processing facilities in Whistler (the Whistler composting facility), Pemberton (Sea to Sky Soils) and the yard waste composting facility at the Lillooet landfill. In addition, there are a range of collection services in place:

- Food waste drop offs in Whistler, Squamish and Pemberton.
- Seasonal curbside yard waste collection in Squamish.
- Yard waste drop offs in Squamish, Whistler, and Lillooet (Note: there is a private depot in Pemberton).
- Seasonal yard waste drop off in Britannia Beach and Furry Creek
- Curbside kitchen scraps collection in Squamish (starting in 2015).

However, the SLRD waste composition data presented in the Stage 1 report indicates that, by weight, organic waste (primarily food) remains a significant component of what is currently landfilled. Consequently, establishing mechanisms to capture organic waste for other purposes (e.g. compost, energy) has the greatest potential for waste diversion and has been identified as a priority for the updated SWRMP.

The following initiatives are intended to maximize the diversion of organic waste:

- Investigate the potential for curbside food scraps and yard waste collection for Pemberton and the surrounding area. See the Residential waste management chapter (Section 10) for more details on this planned initiative.
- Assess the potential for curbside yard waste collection for Lillooet. See the Residential waste management chapter (Section 10) for more details on this initiative.
- Consider the use of financial incentives (e.g. variable tipping fees) to encourage the diversion of yard waste to local yard waste depots and composting sites, help protect air quality and, at the same time, encourage residents to remove excess woody debris around their home. This initiative can be incorporated into the *variable tipping fee coordination* initiative described in the Policy section (Section 9).

Table 12-1 summarizes the new organic waste management initiatives and resource requirements such as staffing and financial implications.

Table 12-1: New Organic Waste Management Initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Investigate organic waste collection in Pemberton		Incorporated into Residential Waste Management Initiatives			
Assess yard waste collection in Lillooet		Incorporated into Residential Waste Management Initiatives			
Financial incentives to encourage diversion of yard waste		Incorporated into Policy Initiatives			



13. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

Waste generated by construction, demolition and renovation projects includes a wide variety of waste materials, including cardboard, plastic, metal and wood. A large portion of the waste is typically reusable, recyclable or can be used as hog fuel in accordance with MoE legislation, regulations and requirements, and therefore this waste stream represents a significant opportunity for waste diversion. The quantity of construction, demolition and renovation waste generated is quite variable compared to other waste streams as it tends to be directly linked with the level of local economic activity.

Local governments encourage separation of the reusable and recyclable portions of construction and demolition (C&D) waste generated in the region, including:

- Applying variable tipping fees;
- Supporting non-profit building material reuse centres in Whistler and Squamish; and
- Recovering of clean wood waste from mixed loads of C&D waste at the Whistler transfer station.

In addition to maintaining these activities, the following new initiatives are planned:

- Establish a Re-Build-It Centre type of facility in Pemberton and Lillooet. These initiatives are described under the Reduce & Reuse section
- Actively promote local C&D waste reuse and recycling opportunities
- Establish a communications plan targeting the construction, demolition and renovation industry that would reduce the amount of C&D waste sent to landfill. Coordinated by the SLRD, possible components of this plan could include:
 - Establishing a mechanism requiring large construction projects to commit to reusing and/or recycling their C&D waste materials as a condition of receiving a building/demolition/renovation permit;
 - Reviewing and revising permitting processes to reduce barriers to deconstruction and/or the complete re-use of a building at a different location (i.e. house moving); and
 - Establishing a 3Rs education and information program focused on construction, demolition and renovation contractors.

Table 13-1 summarizes the new C&D waste management initiatives.

Table 13-1: New C&D Management Initiatives

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Establish a Re-Build-It Centre type of facility in Pemberton and Lillooet		Incorporated into Reduction and Reuse Initiatives			
Promote local C&D waste reuse and recycling opportunities		Incorporated into Communication Initiatives			
Establish a communications plan targeting the C&D industry		Incorporated into Communication Initiatives			

14. LANDCLEARING WASTE MANAGEMENT

Landclearing waste refers to tree waste, including trunks and stumps that are generated as a result of clearing land for development. In the SLRD, land-clearing waste is generally managed in one of the following manners:

- A grinder is brought to the site that was cleared and the ground wood waste is left on-site and incorporated into the soil;
- The wood waste is hauled to a wood waste management site that will grind the wood waste for a subsequent use (composting, hog fuel, etc.);
- At the Lillooet Landfill it is collected bi-annually – brush is chipped and large woody debris is burned or landfilled; and
- At the Gold Bridge Transfer Station it is accepted for fire reduction programs and burned by the Ministry of Forests, Lands and Natural Resources.

In recent years, there has been an emphasis on regularly clearing woody debris from around homes and other buildings to mitigate the risk and spread of forest fires. As a result, residents are encouraged to burn this debris or deliver it to a local facility. Information on burning safely and the Open Burning Smoke Control Regulation are promoted to the public.

There are no new initiatives associated with landclearing waste management planned.

15. RESIDUAL WASTE MANAGEMENT

Residual waste is the portion of municipal solid waste that remains after the diversion of materials destined for reuse, recycling, or composting. Residual waste can be managed through a combination of resource recovery and disposal technologies. Currently all residual waste in the SLRD is managed through landfilling.

15.1 RESOURCE RECOVERY

Resource recovery technologies involve the extraction and utilization of materials and/or energy from the residual waste stream prior to disposal and can provide an opportunity to maximize the use of the resources embedded in residual waste. Extraction of materials is typically done through mixed waste material recovery facilities (MRFs). Extraction of energy is typically done through thermal treatment of waste such as mass burn incineration, pyrolysis, or gasification.

These technologies were assessed for application to the SLRD's residual waste stream as part of the planning process. Specifically, mixed waste processing and waste-to-energy were considered. The assessment determined that: in order for these options to be economically feasible, both mixed waste processing and waste-to-energy require large volumes of waste, much greater than the tonnes available in the SLRD. Consequently, the consultants recommended the SLRD and member municipalities:

- Follow the developments in other regions (e.g. Metro Vancouver and Fraser Valley Regional District) that are exploring resource recovery options,
- Assess new opportunities as they arise or become cost-effective for lower tonnages, and
- Consider out-of-region resource recovery facilities as potential future solutions for managing a portion of the region's residual waste stream, as long as these options do not compromise local waste diversion initiatives.

During the community consultation phase of the planning processing, the Resort Municipality of Whistler and the District of Squamish both passed resolutions indicating that they do not support the thermal treatment of mixed waste as an option for future management of residual waste. Consequently, the above recommendations related to resource recovery will be pursued under this plan, but mixed waste thermal treatment will be excluded from further consideration. It is anticipated that the SLRD will act as a facilitator in the on-going exploration of resource recovery as a residual waste management option in the future.

15.2 DISPOSAL

The long-term vision for disposal in the SLRD is to establish infrastructure to manage residual waste that addresses the following issues:

- Establishing long term residual waste disposal capacity for Squamish,
- Developing strategies to meet the Regions' long term disposal needs for residual waste, and
- Continued regulatory compliance at all residual waste management facilities.

Residual waste is currently received at several transfer stations and landfills within the Region, as outlined in Table 15-1.

Table 15-1 - Summary of Garbage Receiving Facilities in the SLRD

LOCATION	SERVICES AREA(s)	DESTINATION OF RESIDUAL WASTE RECEIVED
Squamish Landfill	Squamish, Pemberton and Areas C,D	Squamish Landfill
Whistler Transfer Station	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill (Washington)
Whistler Function Junction Depot	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill via Whistler Transfer Station
Whistler Nester's Depot	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill via Whistler Transfer Station
Pemberton Transfer Station	Pemberton and Area C	Squamish Landfill
Lillooet Landfill	Lillooet and Area A,B	Lillooet Landfill
Devine Transfer Station	Area C	Squamish Landfill
Gold Bridge Transfer Station	Area A	Lillooet Landfill

Currently, all regional facilities meet provincial guidelines and regulatory requirements.

In order to ensure sustained landfill capacity and continued regulatory compliance at all residual waste management facilities, the following activities are planned:

1. Expand Squamish Landfill to increase the capacity of the landfill. Within the current disposal management operations, the DOS landfill will reach capacity in 2018. An expansion can include a number of steps:
 - a) Expand the landfill laterally to the east. This expansion would provide Squamish with up to 46 years of additional landfill life. However, it may be several years before it is determined whether the lateral expansion is a viable option. For example Squamish needs to consult with Squamish First Nation. This option is also dependent on other expansion options, as described below.
 - b) Expand the landfill vertically on their existing site by constructing retaining walls at the base of the existing landfill that allow the landfill to be built higher (i.e. a vertical expansion). This option has received approval-in-principle by Squamish Council. This could gain 13-14 years of additional capacity and would only accommodate the needs of current users (i.e. primarily Squamish). Whistler would continue to export their solid waste out of the region.
 - c) If the Squamish Landfill receives approval to expand laterally, Squamish, with support from Whistler, Pemberton and SLRD should review the opportunity to designate the Squamish Landfill as a regional landfill. Whistler has indicated their intent to send their waste to the Squamish Landfill on the condition that the site meets BC Landfill Criteria guidelines and that the cost of using the disposal facility is cost competitive with out-of-region options.
2. Establish a working group made up of SLRD, Whistler and Squamish staff with the responsibility of evaluating residual waste management options and reporting to councils and the SLRD Board. This group would continually evaluate in and out of region options for shared disposal services including waste transfer. The group would work closely with First Nations communities and Aboriginal Affairs and Northern Development Canada to manage residual waste cooperatively. Objectives of the group would include lowering residual waste management costs for all and establishing secure long term options for the region.

If a lateral expansion of the Squamish Landfill appears unlikely, SLRD, Whistler, Squamish and affected First Nations need to evaluate long term in and out of region options for shared services. In order to manage

to an out-of-region waste management facility, a large-scale transfer station would need to be constructed either at the landfill or another location within Squamish.

- Evaluate the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria, once the Criteria are finalized. This initiative would be conducted by a qualified consultant.

Table 15-2 details the implications of these recommendations.

Table 15-2: Residual Waste Initiatives

NEW RESIDUAL WASTE MANAGEMENT INITIATIVES	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Expand Squamish Landfill	Squamish	To be determined if approvals are granted	0 (only DOS staffing required)	\$ -	\$ -
Establish a working group with the responsibility of evaluating residual waste management options	SLRD, and member municipalities	2016	20	\$ -	\$ -
Evaluate the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria	SLRD	To commence once the Criteria are finalized	20	\$ -	\$ 15,000 for assessment



16. ILLEGAL DUMPING

Illegal dumping is an issue in many areas of the SLRD, as it is across BC. Although quantities are not significant, illegally dumped waste in the bush and in alleyways is unsightly and can, on occasion, be an environmental hazard. Cleaning up illegal dump sites can also be a costly endeavor for both public and private landowners.

The SLRD and member municipalities regularly support organizations that undertake clean-ups of illegal dump sites or litter. There are bylaws in place throughout the SLRD prohibiting illegal dumping but enforcement is challenging. Consequently, a region-wide illegal dumping strategy will be developed that can better harness the collective resources available in the region. The development of this strategy could be led by the SLRD but it is anticipated that the following stakeholders may also get involved:

- Municipalities
- Forestry companies
- Back-country user groups (mountain bikers, fishermen, etc.)
- First Nations
- BC Hydro
- Ministry of Environment Conservation officers

This strategy may include the following actions:

- a. Conduct a survey to determine the most common materials illegally discarded and the most frequent locations, providing a basis for types of materials and “hot spots” on which to build an education campaign and clean-up program;
- b. Conduct targeted outreach campaigns if/when specific “problem” groups can be identified;
- c. Establish a reporting mechanism where residents and outdoor groups can report dumping location, to be targeted for contracted / volunteer cleanup;
- d. Post signs at frequent illegal dumping sites to educate about reporting and prosecuting dumpers; and
- e. Establish enforcement capacity.

Table 16-1 outlines the estimated timing and resource requirements to establish and implement a regional illegal dumping strategy.

Table 16-1: New Initiatives to Prevent Illegal Dumping

NEW INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Regional Illegal Dumping Strategy	SLRD, municipalities		200	\$ 0	\$ -
<i>Survey</i>		2017	20	\$ 0	\$ 10,000
<i>Campaign</i>		2018	100	\$ 0	\$ 10,000
<i>Signage</i>		2018	20	\$ 0	\$ 10,000
<i>Enforcement</i>		2018	to be determined	\$ 0	to be determined

17. WILDLIFE AND WASTE MANAGEMENT

The SLRD is home to a large population of bears that are integral to the local ecosystem. Having a solid waste management system that minimizes the potential for human-bear conflict is a priority for all local governments and wildlife conservation groups in the area. Currently, local government have the following strategies and bylaws in place to mitigate the potential of wildlife-human conflict associated with solid waste:

- Support to local wildlife awareness groups that encourage citizens to be Bear Smart;
- Design and maintain all solid waste management facilities that receive food waste (e.g. landfills, transfer stations and composting facilities) such that they do not allow access by bears;
- Ensure that all litter containers are animal-proof; and
- Require commercial garbage and organic waste containers that contain bear attractants (e.g. food and grease) to be animal-proof. Note: this requirement is in place for all municipalities but not the SLRD.

It is anticipated that the SLRD will also mandate that commercial garbage and organic waste containers that contain bear attractants (e.g. food and grease) be animal-proof, so that all areas of the SLRD have the same requirement. It is also anticipated that each local government ensure that their bylaw is enforced in this regard.

Table 17-1 outlines the estimated timing and resource requirements for SLRD to establish or amend a bylaw to require commercial garbage and organic waste containers that contain bear attractants to be animal-proofed.

Table 17-1: New Wildlife Management Initiative

NEW WILDLIFE MANAGEMENT INITIATIVES	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Require commercial collection containers to be animal-proof in electoral areas	SLRD	2016	20	\$ -	\$ -
Enforce animal-proofing bylaw requirements	SLRD, municipalities	2016	to be determined	\$ -	\$ -

18. LAND USE PLANNING

Waste management facilities, including recycling, composting and disposal facilities are essential elements of a waste management system. The siting and operation of these facilities should be undertaken in conjunction with long-range community planning at the local government level to protect the environment and minimize the potential for future land use conflicts.

All of the municipal and electoral area Official Community Plans (OCPs) make specific reference to solid waste management and indicate an intention to reduce the amount of waste sent to landfill through the promotion of recycling and composting. Only the Whistler OCP makes specific reference to facilitating EPR facilities (take back depots) in land use decisions.

To ensure that there is a suitable land base available to support the solid waste related goals and initiatives laid out in this plan, as well as in other SLRD and municipal planning documents, it is anticipated that municipal and SLRD solid waste staff collaborate with their organization's planning staff to:

- Consider the need for dedicated zoning for waste management facilities;
- Ensure that land use planning decisions do not compromise the viability of existing or planned waste management facilities;
- Ensure that long-range planning tools like OCPs identify and preserve lands for *future* waste management facilities; and
- Recognize the need for an appropriate land base available to accommodate the shift to EPR take-back programs, which operate like reverse retail and require convenient access in order to be successful.

19. MONITORING OF GREENHOUSE GAS EMISSIONS

Activities relating to solid waste management have the potential to introduce significant quantities of greenhouse gas emissions into the atmosphere. These activities may represent an important proportion of the SLRD’s contribution to climate change.

This SWRMP will contribute to reducing greenhouse gas emissions by facilitating waste reduction and treating solid waste as a resource to be reused or recycled. At present, the monitoring of greenhouse gas emissions from all activities within the SLRD is a component of the SLRD’s Regional Growth Strategy.

Starting from the year of plan adoption the SLRD will conduct an annual review of greenhouse gas emissions from solid waste operations within the regional district. This review will serve as a starting point for identifying and assessing the feasibility of reducing our greenhouse gas emissions from the management of solid waste in the region, as well as assessing the effectiveness of the SWRMP initiatives in reducing greenhouse gas emissions.

Table 19-1 outlines the estimated timing and resource requirements for the SLRD to establish an annual review of the region’s greenhouse gas emissions from solid waste operations.

Table 19-1: New Greenhouse Gas Monitoring Initiative

NEW GREENHOUSE GAS MONITORING INITIATIVE	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Monitor greenhouse gas emissions from solid waste operations on an annual basis; collect and compile data from available SLRD and Municipality Reports for solid waste operations	SLRD	2016	10 - 20	\$ -	\$ -

20. AUTHORITY OVER WASTE MANAGEMENT ACTIVITIES IN THE SLRD

For the purposes of implementing an approved SWRMP, Section 25 of the BC Environmental Management Act contains provisions for Regional Districts to assert authority over the establishment and operation of solid waste management facilities and haulers by regional districts.

The SLRD's current Plan includes a process to authorize new facilities that are not authorized within the Plan. This process is intended to ensure that new facilities in the SLRD support the objectives of the Plan and do not undermine the SLRD's or member municipalities' capacity to operate the programs and infrastructure described in the Plan.

During this planning process, other options to assert authority over facilities and haulers, such as licensing and codes of practice, were examined. It was concluded that these forms of regulatory control were not required at this time but may be required in the future. In the interim:

- As tipping fees in the region increase to cover capital and operating costs, the development of a waste stream management licensing system and/or flow control bylaw be considered to ensure that waste generated in the region is managed at authorized facilities; and
- The SLRD and member municipalities regularly monitor the level of waste export to determine if there is a need to establish a bylaw mechanism to regulate where waste generated in the SLRD can be delivered.

The current process to authorize new facilities, as presented in Appendix B, will be maintained and that all applicants for the development of waste management facilities within the boundaries of the SLRD (including within municipal boundaries) referred to the SLRD for consideration under the authorization process. This includes all facilities intending to handle municipal solid waste, including recycling and composting facilities. Facilities that will not be subject to this authorization process include:

- EPR facilities established by product stewardship organizations;
- Municipal solid waste management facilities; and
- Facilities established to refurbish and/or sell used goods, such as thrift stores and repair shops.

Currently authorized facilities include:

- District of Squamish Landfill;
- Lillooet Landfill;
- Lillooet Materials Recovery Facility (at the Lillooet Landfill);
- Resort Municipality of Whistler Transfer Station;
- Resort Municipality of Whistler Composting Facility (at the Whistler transfer station);
- Nesters and Function Junction Depots (Whistler);
- Gold Bridge Transfer Station;
- Devine Transfer Station;
- Pemberton Transfer Station;
- Carney's Materials Recovery Facility; and
- Sea to Sky Soils.

The SLRD anticipates reviewing the fee schedule associated with facility authorization to ensure that there is better cost recovery for the staff resources required to manage the authorization process.

21. PLAN IMPLEMENTATION

21.1 ESTIMATED DIVERSION

Table 21-1 shows the estimated diversion that can be achieved if all of the initiatives listed in this document are implemented. By diverting more waste materials to reuse, recycling and composting, the SLRD can reduce the amount of garbage sent to disposal from 526 kg per capita (2012) to 348 kg per capita. Accordingly, this would increase the diversion rate from 43% to 62%.

Table 21-1: Estimated Diversion

DISPOSAL AND DIVERSION	ESTIMATED TONNES (2012)	IMPACT OF NEW DIVERSION
Total disposal	26,966	17,833
Total diversion	20,144	29,276
Total waste generation (disposal + diversion)	47,110	47,110
Diversion rate (diversion/waste generation)	43%	62%
Per capita disposal rate	526 kg	348 kg

21.2 IMPLEMENTATION SCHEDULE AND COSTS

Table 21-2 shows the planned timing for implementation of the new initiatives described in the previous chapters as well as the estimated annual operating cost for each year, by initiative. The annual financial implications to the SLRD from 2015 to 2020 are provided on the bottom line of the table. All initiatives involving municipal costs will need to be defined and approved by each municipality. As shown, the annual cost of the new initiatives ranges from a high of \$71,000 in 2018 to a low of \$20,000 in 2020. It is possible that the cost of some initiatives may be mitigated through contributions from municipalities and First Nations as a result of collaboration efforts.

Table 21-2: Implementation Schedule and Estimated Costs

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
Communications						
Residential Food Scraps Reduction Campaign	\$ 46,000	\$ 10,000	\$ 10,000			
ICI and multi-family communication strategy			\$ 20,000	\$ 10,000		
Tourist accommodation communications strategy					\$ 15,000	\$ 5,000
Construction, demolition and renovation contractor communication strategy					\$ 10,000	\$ 5,000
Expansion of zero waste workshops	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
Coordination of local governments' internal zero waste initiatives	\$ 500	\$ 500				
Bear Smart backyard composting	\$ 1,000			\$ 1,000		
EPR awareness		\$ 1,000			\$ 1,000	
Promote local C&D waste diversion opportunities		\$ 1,000			\$ 1,000	
Reduction and Reuse						
Establish a Re-Build-It Centre type of facility in Pemberton			<i>cost to be determined</i>			
Establish a Re-Build-It Centre type of facility at Lillooet Landfill				<i>cost to be determined</i>		
Fund for local zero waste initiatives			\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Extended Producer Responsibility						
Landfill bans on specified EPR materials/products						
Policy Initiatives						
Establish more consistent tipping fee categories						
Residential Waste Services						
Curbside collection services in Pemberton area						
<i>Community consultation</i>	\$ 2,500					
<i>Implementation</i>		<i>if approved</i>				
<i>On-going collection service</i>			<i>cost to be determined</i>			
Assess curbside recycling/yard waste collection in Lillooet						
Commercial and Multi-Family Waste Services						
Require recycling and waste minimization at events		\$ 1,000				
Require new developments to design for 3 stream waste management		\$ 2,000				
Residual Waste Management						
Assess Lillooet Landfill's compliance with new BC Landfill Criteria		\$ 15,000				
Illegal Dumping						
Illegal Dumping Strategy						
<i>Survey</i>			\$ 10,000			

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
<i>Campaign</i>				\$ 10,000		
<i>Signage</i>				\$ 10,000		
<i>Enforcement</i>				<i>cost to be determined</i>		
Wildlife Management						
Mandatory animal-proof commercial collection containers						
Monitoring and Measurement						
Waste composition study				\$ 30,000		
Estimated new operating costs	\$ 55,000	\$ 35,500	\$ 50,000	\$ 71,000	\$ 37,000	\$ 20,000

Capital costs associated with the initiatives are limited to the following:

- Establishing a Re-Build-It Centre at the Lillooet Landfill; estimated to be \$15,000;
- Establishing a Re-Build-It Centre for Pemberton; the costs for this facility are to be determined and will be dependent on where the facility is located and who owns/operates it;
- Curbside collection containers for Pemberton; the costs to provide containers will be determined based on the extent of services provided (if collection services are implemented subsequent to community consultation);
- The expansion of the Squamish Landfill; these costs will be borne by the District of Squamish; and

Based on the evaluation of the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria, upgrades may be required (capital costs to be determined).

21.3 STAFFING IMPLICATIONS

Table 21-3 shows the SLRD staffing implications by initiative and annually. All hours shown in the table below are associated with new initiatives and are expected to require staff resources in excess of the resources currently allocated to solid waste management. This table does not include staff resource implications for the municipalities or First Nations to undertake or collaborate in the initiatives presented in this plan.

Table 21-3: SLRD Staffing Implications by Initiative and Annually

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
Communications						
Residential Food Scraps Reduction Campaign	500	1000	200			
ICI and multi-family communication strategy			1000	500		
Tourist accommodation communications strategy					500	250

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
Construction, demolition and renovation contractor communication strategy					500	250
Expansion of zero waste workshops						
Coordination of local governments' internal zero waste initiatives	40	40				
Beat Smart backyard composting	20	20	20	20	20	20
EPR awareness	20	20	20	20	20	20
Promote local C&D waste diversion opportunities	40	20	20	20	20	20
Reduction and Reuse						
Establish a Re-Build-It Centre type of facility in Pemberton			40	40	20	20
Establish a Re-Build-It Centre type of facility at Lillooet Landfill				60	20	20
Fund for local zero waste initiatives			15	15	15	15
Policy Initiatives						
Establish more consistent tipping fee categories		10	10	10	10	10
Extended Producer Responsibility						
Landfill bans on specified EPR materials/products		40				
Residential Waste Services						
Curbside collection services in Pemberton area						
<i>Community consultation</i>	80					
<i>Implementation</i>						
<i>On-going collection service</i>			<i>to be determined</i>			
Assess curbside recycling/yard waste collection in Lillooet		20				
Commercial and Multi-Family Waste Services						
Require recycling and waste minimization at events		10	10	10	10	10
Require new developments to design for 3 stream waste management		40	40			

NEW INITIATIVES	2015	2016	2017	2018	2019	2020
Residual Waste Management						
Assess Lillooet Landfill's compliance with new BC Landfill Criteria		20				
Illegal Dumping						
Illegal Dumping Strategy						
<i>Survey</i>			20			
<i>Campaign</i>				100		
<i>Signage</i>				20		
<i>Enforcement</i>				to be determined		
Wildlife Management						
Mandatory animal-proof commercial collection containers		20				
Enforce animal-proofing requirements in bylaw		to be determined				
Monitoring and Measurement						
Waste composition study				20		
Estimated new operating costs	700	1260	1395	835	1135	635

21.4 COST RECOVERY

Cost recovery mechanisms that will be utilized to fund the Plan's implementation include:

- User rates,
- Tipping fees,
- Taxation,
- Sponsorship, and
- Grants.

In general, user-pay and market-based incentives, such as tipping fees and user fees for curbside collection services, will be applied to the provision of solid waste services wherever possible. Where an initiative provides a global benefit, such as campaigns to encourage waste reduction and diversion or the clean-up of illegal dump sites, cost recovery through taxation may be applied. As appropriate, opportunities for sponsorship and grants will be utilized to assist in the funding of programs.

22. PLAN TARGETS

The BC Ministry of Environment has established service plan targets for solid waste management that they can only achieve through the actions of BC regional district and municipalities that have direct responsibility for managing solid waste programs and infrastructure. It was recommended by the Advisory Committee that the targets for this plan align with the Ministry's⁹. As a result, the following two targets are presented. Progress towards these targets will be assessed on an annual basis and the on-going relevancy of the targets will be reviewed within a five year period, as proposed by the Ministry's Solid Waste Management Planning Guideline Intentions Paper (September 2015).

1. The SLRD achieve an average municipal solid waste disposal rate of 350 kilograms per capita by 2020.

As presented in Section 22, upon full implementation, the initiatives presented in this plan are expect to achieve a per capita disposal rate of 347 kg per capita (down from 525 kg in 2012), indicating that the target is achievable but that the work laid out in this plan needs to be undertaken in order for it to be achieved.

2. That 75% of SLRD's population is actively engaged in organic waste diversion.

The Province has identified organics diversion as one of the largest opportunities to achieve a significant reduction in the amount of waste disposed (by weight). Organics diversion is also a priority in this Plan, with several initiatives focused on enhancing organic waste diversion, particularly in the southern corridor where there are two composting facilities in operation. Based on 2011 census data, this target could be achieved by ensuring that the communities of Squamish, Whistler and Pemberton are actively engaged in organic waste diversion – these communities alone represent 77% of the SLRD population, as shown in the table below.

Census Area	% of SLRD Population ¹⁰
Lillooet	6%
Pemberton	6%
Squamish	45%
Whistler	26%
First Nations Reserves	9%
Squamish-Lillooet A	1%
Squamish-Lillooet B	1%
Squamish-Lillooet C	5%
Squamish-Lillooet D	2%
Squamish-Lillooet	100%

} **77%**

⁹ The MOE's service plan targets are: Per capita municipal solid waste disposal of 350 kg per person) and 75% of BC's population covered by an organics disposal ban by 2020. Because disposal bans are not part of the planned initiatives in the updated plan, the target related to organic waste has been modified to achieve the same objective (organic waste diversion).

¹⁰<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Census/2011Census/PopulationHousing/MunicipalitiesByRegionalDistrict.a.spx>



23. MONITORING AND MEASUREMENT

Upon completion of this updated solid waste management plan, the Plan Monitoring Advisory Committee (PMAC) will resume. PMAC monitors the implementation of the Solid Waste and Resource Management Plan and reports directly to the Regional Board.

Plan Monitoring Advisory Committee members:

- Review and become familiar with the Solid Waste Management Plan;
- Review and become familiar with the existing solid waste management system in the SLRD;
- Identify methodologies to be employed in the monitoring and evaluation of the Plan's implementation;
- Monitor the implementation of the Plan and annually report to the Board on the effectiveness of the SWRMP at achieving its objectives; and
- Make recommendations to increase the effectiveness of the Plan or the solid waste management system.

The committee membership strives to have a broad representation of interests including the following:

- Local government/public works representatives from municipalities within the SLRD (4 members)
- SLRD staff (2 members)
- First Nations representatives within the SLRD (4 members)
- Members at Large - Interested members of the public, including local environmental groups and recycling organizations, owners and operators of private waste facilities, commercial and institutional solid waste generators, haulers and operators. (6 members, representing at least 3 electoral areas).

The Committee consists of a minimum of 7 and a maximum of 16 members. Terms of reference for PMAC are provided in Appendix C.

23.1 MEASURING PROGRESS

Progress towards the targets presented in Section 21 will be assessed on an annual basis.

Per capita disposal will be measured using the aggregate quantity of municipal solid waste sent to disposal at SLRD and municipal disposal facilities for landfilling. This quantity (in tonnes) will be divided by the estimated or known population as defined by BC Stats Census data and population projections.

To measure the percentage of population actively engaged in organic waste diversion, the Plan Monitoring Advisory Committee will assess which communities have implemented initiatives to support full organics diversion (yard waste and food waste diversion from the ICI and residential sectors), which may include some or all of the following:

- Implementing variable tipping fees that act as an incentive to source-separate organic waste;
- Implementing bylaws that require source-separation of organic waste at businesses;
- Providing collection services (curbside or depot) for residential organic waste;
- Ensuring the availability of commercial organic waste collection services; and
- Providing or supporting organic waste processing infrastructure.

Using BC Stats Census data and population projections for each municipality and electoral area, the percent of the SLRD actively engaged in organic waste diversion can be estimated.

23.2 ON-GOING MONITORING AND EVALUATION

A significant focus of this plan is on using community-based social marketing to help achieve a significant and sustained reduction in the amount of waste sent to landfill. Using a CBSM approach includes on-going measurement and evaluation of the communication initiatives to ensure that they are meeting their intended objectives. As each communication strategy is implemented, a combination of qualitative and quantitative evaluation criteria will be established to measure the effectiveness of the program and identify if there is a need to modify or enhance the program based on results.

In 2018, a waste composition study will be conducted to assess the types of materials that continue to be landfilled and their relative quantity. This study will identify how much of what is being landfilled in 2018 could be composted, recycled or managed through an EPR program.

24. PLAN FLEXIBILITY

Costs provided in this plan are estimated in 2015 dollars and may not reflect actual costs at the time of implementation. In addition, the initiatives described in this plan are based upon knowledge of the waste management system and regulations in place in 2015 that may or may not be in place in the future. As a result, initiatives described in this report may undergo further assessment, including an assessment of costs and continued community support, by the Plan Monitoring Advisory Committee and/or the SLRD Board prior to implementation.

The Plan's implementation schedule is intended to be flexible to allow for changes in priorities and available funding. Notwithstanding, the contents of this Plan are subject to legal requirements and, as a result, guidance and the direction from the Ministry of Environment will be sought in regards to the level of flexibility, as appropriate.

25. APPROVAL BY THE BOARD

This Plan was approved by the Board of Directors by the following resolution on March 16, 2016:

It was moved and seconded:

THAT the Squamish-Lillooet Regional District Board adopt the Solid Waste and Resource Management Plan (SWRMP), including Section 19 Greenhouse Gas Emission Monitoring, and approve its submission to member municipal Councils for their support and to the Ministry of Environment.

CARRIED



APPENDIX A:

***Solid Waste and Resource
Management Strategic
Communications Plan***



Squamish-Lillooet Regional District

Solid Waste & Resource Management Strategic Communications Plan

Prepared by: Sue Maxwell
Principal, Ecoinspire Planning

In collaboration with:

Randi Kruse, Kruse Consulting
Adam Less, Propeller Brand
Jan Enns, Jan Enns Communications
Tamara Shulman, Tetrattech EBA Inc.

August 2014



Ecoinspire

EXECUTIVE SUMMARY

The Squamish-Lillooet Regional District (SLRD) has committed to updating solid waste reduction goals and implementing an action plan to achieve them. This requires a strategic communications plan to assist in achieving these goals. Apart from the moral imperative of reducing and diverting waste, provincial waste reduction targets, significant landfill management costs, and growing resident and visitor populations are additional factors driving the urgent need for regional leadership.

The SLRD is unique with both concentrated and dispersed populations, urban and rural cultures, and small-town service and international tourism industries. To ensure lasting support for the waste reduction communications strategy outlined in this document, the design process was inclusive and collaborative, and has in many ways prepared a strong foundation for ongoing strategic partnerships. In addition to the SLRD itself, many stakeholders play a role in communicating about solid waste, from member municipalities like Lillooet, Squamish, Pemberton and Whistler, to First Nations communities, service providers, and non-profit groups like AWARE, Squamish CAN and Whistler Community Services Society.

Before developing new materials or creating a communications strategy, a detailed analysis of existing SLRD and partner organization waste reduction communications materials was conducted. Nearly all of the existing resources were focused on raising general public awareness, and communications messages were inconsistent in design and delivery. The final strategy provides logical, research-based online and print communications tools, recognizing and supporting different audiences at different stages of change. Most importantly, the strategy is not about raising awareness; it is designed to remove specific barriers to targeted waste reduction goals, and provides creative and dynamic promotional materials to motivate action.

This strategy will meet the waste reduction and diversion communications needs of the SLRD over the next five years by:

- Building on existing organizational objectives and strengths of the SLRD and partner organizations;
- Providing a unifying brand that harmonizes waste reduction efforts across the region;
- Focusing on proven audience-focused social marketing technique and behavioral change science;
- Identifying specific belief, behavior, and knowledge objectives, and a practical action plan to achieve them;
- Creating an approach that can be replicated to solve other social, environmental or economic challenges.

Implementation of the strategy will require ongoing organizational leadership and commitment to regional partner collaboration. A modest implementation budget is included in the plan which includes both ongoing management costs as well as one-time investments to modernize outdated communications infrastructure, such as consistent signage and effective print materials. Success metrics and evaluation tools are also included, and partnership roles are suggested.

Significant progress on waste reduction in the SLRD requires a combination of organizational structural change and grassroots public engagement. The communications strategy provides a detailed outline of how to begin, progress, and assess progress in both realms. By combining best practices in solid waste reduction, governance, public engagement, and behaviour change, the final strategy has prepared the SLRD to become a role model for regional governments across North America. Implementing an approach that is innovative and visionary requires political courage, but there are meaningful rewards: reduced waste, fostering a culture of conservation, lasting public support, and continuous improvement in sustainable waste management.

TABLE OF CONTENTS

1	Plan Goals and Objectives	5
1.1	Introduction	5
1.2	Goals & Objectives	5
2	Analysis of Current Situation	6
2.1	Overview	6
2.2	Support for Solid Waste Reduction Communications within the SLRD	8
2.3	Existing SLRD Communication Materials for Waste Reduction and Diversion	8
2.4	Stakeholder Interviews	10
2.5	Communications Material and Interview Analysis.....	11
2.6	PEST and SWOT	12
2.7	Literature Review	13
2.7.1	Social Marketing	13
2.7.2	Communications Channels	15
2.8	SLRD Context	16
3	Target Audience and Stakeholder Identification	16
3.1	Segmentation Process.....	17
3.2	Insight into Audiences and Waste Reduction	17
3.3	Single Family Residence Profile.....	18
3.4	Future Recommended Target Audiences.....	19
3.4.1	ICI.....	19
3.4.2	Multi-Family.....	19
3.5	Marketing Mix	19
4	Recommended Strategy	21
4.1	Communications Strategy Phases	21
4.1.1	Phase 1: Develop the Social Marketing Plan.....	22
4.1.2	Phase 2: Develop Tools	22
4.1.3	Phase 3: Program Notification	23
4.1.4	Phase 4: Program Announcement	23
4.1.5	Phase 5: Program Promotion.....	24
4.1.6	Phase 6: Evaluation and Ongoing Communication	24

5	Branding & Messaging	24
5.1	Guidelines for Developing Reduction/Diversion Theme Messaging	24
5.2	Food Scraps Reduction Messaging – A Working Example.....	25
6	Promotional Tools.....	27
6.1	Dynamic Engagement	28
7	Implementation Plan & Evaluation.....	30
7.1	Role of Stakeholders	30
7.1.1	SLRD Role	30
7.1.2	Municipal Role	31
7.1.3	First Nations Role.....	32
7.1.4	Service Provider Role	32
7.1.5	Shared Responsibility.....	32
7.2	Food Scraps Reduction Campaign Snapshot	33
7.3	Resources Required	33
7.4	Expected Outcomes	34
7.4.1	Process Evaluation	35
7.4.2	Qualitative Success Measures	35
7.4.3	Quantitative Success Measures	36
7.4.4	Providing Feedback.....	36
	Appendix A: Waste Reduction/Diversion and Communications Research.....	37
	Appendix B: Suggestions for Future Community-Based Social Marketing Programs.....	40
	Appendix C: Social Marketing Audience Segmentation Process	41
	Appendix D: Potential Stakeholder List	42
	Appendix E: SLRD Statistical Information	45
	Appendix F: Recommendations for Signage and Bins	47
	Appendix G: Focus Group Results.....	51
	Appendix H: Action Plan	54
	Phase 1: Develop the Social Marketing Plan	54
	Phase 2: Develop Tools.....	55
	Phase 3: Program Notification.....	60
	Phase 4: Program Announcement	63
	Phase 5: Program Promotion.....	64
	Phase 6: Evaluation and Ongoing Communication.....	66



Appendix I: Recommendations for SWRMP Consultations70

Appendix J: Regional Events –List, Selection and Toolkit73

Appendix K: Media Story Starters.....75

Appendix L: Icon76

Appendix M: Sample Pledge Card77

List of Tables

Table 2-1 SLRD Communications Resources Reviewed9

Table 2-2 Waste Reduction Stakeholders Interviewed10

Table 7-1 Budget for Resources.....34

Table E-1 Household and dwelling characteristics46

Table H-1 Phase 1 Actions54

Table H-2 Phase 2 Actions55

Table H-3 Phase 2 Food Scraps-Specific Actions.....59

Table H-4 Phase 3 Actions61

Table H-5 Phase 4 Actions63

Table H-6 Phase 5 Actions65

Table H-7 Phase 6 Actions67

List of Acronyms

- ENGO –Environmental Non-Governmental Organization
- EPR –Extended Producer Responsibility
- FAQ –Frequently Asked Questions
- ICI –Institutional, Commercial and Industrial, a sector used to categorize sources of municipal solid waste
- MMBC –Multi Material BC, a new stewardship program for packaging and printed paper
- PEST –Political, Economic, Social and Technological
- PSA –Public Service Announcement
- Q & A –Question and Answer document
- RCBC –Recycling Council of BC
- RMOW –Resort Municipality of Whistler
- SLRD –Squamish-Lillooet Regional District

SWMP –Solid Waste Management Plan

SWOT –Strengths, Weaknesses, Opportunities and Threats

SWRMP –Solid Waste and Resource Management Plan

ZW –Zero Waste

Glossary

Audience: the part of the general public interested in a source of information. This can be further segmented into primary and secondary target audiences as well as intermediaries (people or groups that can act as a conduit for information) and influencers (people or groups that are perceived as trusted sources of information).

Brand: a brand consists of a name, logo, slogan, term, design or any combination of these elements used to identify a product, service or organization.

Branding: is a marketing strategy that can be used to create a readily recognizable image that is associated with a product, service or organization through consistent and repetitive use in all elements of advertising and promotion including: logos, slogans, colour schemes, advertising, print materials, web sites, correspondence tools (email signatures, letterhead, voice mail), signage, messaging and spokespersons.

Collateral Material: visual materials used to support a program or service, such as brochures, signs, websites and displays.

Communications Channels: ways to disseminate information, used primarily in this plan to describe ways to reach the target audiences such as through the media or personal contact.

Communication Tools: specific, proven communication tactics that can be used to communicate, such as an e-newsletter (sent via email) or paid newspaper advertising.

Social Marketing: A research-based marketing system in the social sciences that demonstrates behaviour change is most effectively achieved through initiatives delivered at the community level focusing on removing barriers to an activity while simultaneously enhancing the activities' benefits. It emphasizes direct contact among community members and uses a set of approaches which have been identified as being particularly effective in fostering behavioural change.

Media Release: used to announce newsworthy items to the media, a media release (also known as a news or press release) consists of one or two pages that are emailed to media outlets potentially resulting in a news or feature story. Media releases are written to cover the 5W's (who, what, when, where, why) plus, 'why is this important. Timely, well-written news releases can also serve to strengthen relationships with local media and increase positive media coverage.

Public Service Announcement (PSA): similar to media releases, a "PSA" is typically shorter, about one paragraph, and consists of a brief and timely announcement sent to local media. PSAs can result in free publicity provided by radio stations, newspapers, and local television stations to promote current events in the community.

1 PLAN GOALS AND OBJECTIVES

1.1 Introduction

The purpose of this document is to provide the Squamish-Lillooet Regional District (SLRD) with a practical road map to improve regional communications capacity for sustainable resource management of solid waste and materials. This document will provide the rationale behind the recommendations. Research from the resource management and social marketing fields was reviewed and combined to develop an action plan that takes into consideration current opportunities and constraints and should be updated and refreshed by the SLRD as the first programs and projects are completed and new behaviours are targeted.

The plan is intended to:

- **Base recommendations** for the campaign on a review of existing research to ensure the best approach
- **Incorporate best practices** in communications and social marketing
- **Identify future research requirements**
- **Provide a detailed Implementation Plan** that identifies tasks and timelines for an initial program and that can be used as a template for future campaigns
- **Design strategies** to meet the intent of the SLRD solid waste management plans and budget for communications.

The plan provides direction in key areas that include:

- **Building public awareness** about the SLRDs waste reduction programs and strengthening stakeholder relationships
- **Undertaking communication and community-based social marketing strategies and tactics** for the launch of new programs and ongoing communication for the reduction of SLRD's solid waste.

The plan should be considered a “living document” to be updated as necessary by the SLRD, with aspects that may change to include new information gleaned from research and program evaluations. Changes can be made to better inform program strategies and tactics. As a living document, it is flexible and can be adjusted to meet changing conditions and availability of resources and help provide direction for decisions about future programs.

1.2 Goals & Objectives

There are overarching waste reduction and diversion goals flowing from the SLRD SWRMP update process. While specific targets are yet to be determined, the communications strategy will advance their progress. The communications strategy is grounded on the following mix of knowledge, belief, and behaviour objectives, and an overall vision for the SLRD to be seen as a key source of information, inspiration, and integration of resources that help the region and all its stakeholders to achieve Zero Waste.

Social transformation is a long-term process that requires persistence and commitment. Behaviour change is challenging to measure, and we caution the tendency to draw correlations between planned interventions and observed changes in public behaviour. Most social marketing programs target a 5% rate change within 2-3 years based on focused and consistent communications programming. To ensure that we engage the target audiences at

various stages along the behaviour change spectrum, the communications strategy incorporates tactics that meet all of the following objectives:

Knowledge Objectives

What do our target audiences need to learn?

- Waste reduction and diversion options and services in their community
- Community waste reduction targets and progress towards them
- Social, environmental, ecological and economic impacts of inappropriate resource management
- How to improve their participation in waste reduction and diversion
- Personalized benefits of reducing household waste

Belief Objectives

What do our target audiences need to feel?

- Inspired to help achieve the community waste reduction and diversion goals
- Convinced that other people “just like them” are already reducing waste
- Impacts of resource management on their values (i.e. community economic benefit, environmental health, peer belonging)
- It is easy to find out what they need to know
- Their actions make a difference

Behaviour Objectives

What do our target audiences need to do?

- Initiate and sustain waste reduction and diversion systems
- Reduce the amount of materials that flow through households and businesses
- Put the correct materials in the correct bins
- Motivate and inspire others to improve their waste reduction, material reuse, and waste diversion efforts

These objectives have been applied to all sections of the communications strategy, and have corresponding evaluation metrics suggested in Implementation and Evaluation Section 7.

2 ANALYSIS OF CURRENT SITUATION

2.1 Overview

The first step of any strategic communications plan is to evaluate existing communications materials which may be leveraged for future value. The methodology included compiling and assessing SLRD print and online materials, and interviews with key SLRD stakeholders. Best practices in social marketing were applied to the research materials to determine which tools and messages predispose (inform), enable (support behaviour change) and reinforce (reward) behaviour change. The purposes of the SLRD communications tools used to date were also identified, and suggestions made as to where the information gaps may have been in the past (see Table 2.1). Communications materials were also evaluated to determine the intended target audience.

This initial research identified a number of areas for increased efficiency in the delivery of waste reduction and diversion communications across the SLRD. The background analysis has indicated that nearly all resources are focused on raising awareness, or providing information, and that the intended audience is primarily residential. These findings indicate that there is a need for future online and print communications tools to recognize and support different audiences at different stages of change. For example, target audience segments may include: rural/urban communities, small private sector, large public sector, etc. By segmenting audiences, the SLRD can more effectively remove barriers to change and include relevant motivating messaging. Behavioural change science demonstrates greater results will emerge from a coordinated and strategic approach, where all stakeholders work collaboratively to shift current unsustainable waste management norms (Weinreich, Nedra: Hands-On Social Marketing second edition, 2011).

Beyond coordination of communications, the SLRD is poised to provide a stronger leadership role while also delivering practical support for municipal waste reduction services as required. The member municipalities have indicated that there is a strong willingness to collaborate on regional Zero Waste programs and they would welcome greater consistency in both structure (public policy) and communication (public engagement). Most municipalities appear to have similar priorities and specific requests for regional government leadership. Further, the SLRD Solid Waste & Resource Management Plan (SWRMP) Advisory Committee process has created an expectation that the SLRD is already moving towards an expanded waste reduction and diversion leadership role. In addition, at the provincial level, the new Multi Material BC¹ program has generated a “teachable moment” for the public, and created a deeper need for collaboration across the region. Finally, there is a move towards greater collaboration with First Nations in this next version of the SWRMP which could allow for stronger communications on solid waste reduction with all residents and businesses within the SLRD boundaries.

Analysis of current communications tools both within the SLRD and stakeholder organizations, combined with key stakeholder interviews, have revealed a number of practical opportunities. The following list of recommendations will be outlined in detail throughout this report.

- Successful waste reduction programs are simple to understand, and the benefits of participation are easily visible and meaningful to the target public audience. Similarly, specific and time-sensitive calls-to-action are most effective.
- Consistent messaging across the SLRD, whilst respecting the diverse range of audiences, will create greater public awareness and engagement opportunities. Connecting more deeply to existing complementary waste reduction campaigns promoted across BC will help to build a new waste reduction norm.
- Communications tools needs to serve a clear purpose along the behaviour change spectrum, and should be intended to reach a specified target audience (i.e. introduce a service and identify benefits to audience; remove barriers to action and provide incentives; reward participation).
- Zero Waste values are an important foundation to any communications efforts, however, the messaging that may be most effective with target audiences needs to be tailored to meet their needs; “Zero Waste” may be best incorporated into the guiding sustainable resource management public policies.

¹ Multi Material BC or MMBC is a new extended producer responsibility programs in BC responsible for reducing and recycling packaging and printed paper.

2.2 Support for Solid Waste Reduction Communications within the SLRD

The SLRD's focus on waste reduction and minimization is supported by many regional and municipal strategies and studies. Some of these also note communications-related aspects. Details on these guiding policy and program documents are provided below.

The SLRD Regional Growth Strategy encourages Zero Waste, reuse and recycling, living within the limits imposed by natural systems and reducing our dependence on non-renewable resources. Directions are to strive towards Zero Waste by implementing a strategy to reduce solid waste and to promote public education on various environmental topics. The SLRD Integrated Sustainability Plan also "encourages Zero Waste, reuse and recycling." Key waste communications-related actions include developing a Zero Waste Communications Plan, encouraging reduction and diversion, reuse it stores and EPR, and supporting composting in a manner that reduces bear conflicts. The SLRD Energy Task Force report also advocates for becoming a Zero Waste community and the need for providing clear information on waste reduction as well as feedback on waste.

Some community-specific plans also match the SLRD solid waste vision. The Whistler 2020 sustainability plan included significant community involvement in its development and Whistler committed to a Zero Waste goal. Descriptions of Success included advocating for Zero Waste and providing education. For Lillooet, the OCP notes the need to work with the SLRD and provincial governments on waste reduction, reuse, recycling and education initiatives and most OCPs in the region refer to waste reduction as a goal. In the 2010 Squamish Solid Waste Strategy, goals for Squamish include engaging the community in solid waste decision-making and reducing waste. The Whistler Solid Waste Strategy recommended embedding Zero Waste in the plans, actions and culture of Whistler; providing promotion and education for existing systems, prevention and compost options as well as for special events; and using Zero Waste stations. The Lil'Wat Nation community land use plan of September 2009 identified the goals of maximising disposal site life through the 3Rs diversion, and increasing environmental awareness throughout the community to achieve these goals.

The existing SLRD Solid Waste Management Plan (SWMP) also has some recommendations relating to communications: developing a communications plan, updating the website, designing and updating SLRD print media, community and events outreach, delivering a school program, and supporting the Recycling Council of BC's hotline and promotion. There are also specific tasks that require promotion or work with a specific sector to change certain behaviours. Through the update process for the SWMP, new actions, target sectors and specified behaviours will be identified.

2.3 Existing SLRD Communication Materials for Waste Reduction and Diversion

A review was conducted of all known SLRD samples of print material and online promotion. The materials reviewed are described below in Table 2-1. Each item was reviewed for intended target audience, material purpose, and the stage of behaviour change desired. In general, the resources seemed intended to reach broad public audiences who were already likely to engage in waste reduction activities. Ideally, resources support various stages of change from early contemplation (inform and predispose), to preparation (enable and remove barriers to action) to reinforcement (maintenance of desired new behaviours) (Savelson et al., 2007).

Table 2-1 SLRD Communications Resources Reviewed

Material	Target Audience	Purpose of Material	Stage of Change	Recommended Action
The Smart Gardener Brochure (2011)	Residents across SLRD	Enable gardening without chemicals	Enable	Make available as a download from backyard composting section of SLRD website
The Dirt on Indoor Composting Brochure (2011)	Residents across SLRD	Start and maintain vermicomposter	Enable	Make available as a download from backyard composting section of SLRD website. Check aspects on Whistler with the RMOW.
The Dirt on Compost –Home Composting (2011)	Residents across SLRD	Start and maintain back yard composter	Enable	Discontinue as information on Whistler incorrect. Can use other content on website
Compost Your Food Waste & Support Local Food Brochure (2013?)	Residents across the SLRD, likely mainly Pemberton	Increase organic waste diversion to Pemberton Transfer Station	Enable	Discontinue
5 Simple Steps in Making Compost in Bear Country (2011)	Residents in Squamish	Start and maintain backyard composter	Enable	Make available as a download from backyard composting section of SLRD website
Asbestos Control Program Brochure (2011)	Residents across SLRD	Safe handling of asbestos	Predispose	Adapt and integrate content into hazardous waste section of SLRD website
Devine Recycling Brochure (2011)	Residents in Devine	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
Pemberton Recycling Brochure (2014)	Residents in Pemberton	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
Lillooet Recycling Brochure (2011)	Residents in Lillooet	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
RMOW Recycling Info Online	Residents in Whistler	Promote recycling	Predispose	RMOW to integrate new SLRD branding. Provide link to RMOW website from SLRD website
RMOW Composting Info Online	Residents in Whistler	Promote composting	Predispose	RMOW to integrate new SLRD branding. Provide link to RMOW website from SLRD website

Whistler2020 Metrics Online and iCitizen 2013 Online	Residents in Whistler	Update on waste reduction progress	Reinforce	Do not provide link unless updated
Sea to Sky Eco Guide	Residents in Squamish	Broad waste reduction ideas and resources	Enable	Make available as a download from the Reduce page of the SLRD website
Squamish CAN recycling info	Residents of Squamish	Promote recycling	Enable	Request that CAN incorporate updated info from Carney's
Carney's Recycling and Composting info online	Residents across SLRD, mainly Squamish and Whistler	Promote recycling and composting	Enable	Carney's to integrate new SLRD branding. Provide link
Got Hazardous Waste? flyer	Residents of Lillooet	Responsible disposal of hazards	Enable	Adapt and integrate content into hazardous waste section of SLRD website
Food Scraps Drop Spot flyer	Residents of Pemberton	Participation in community composting	Predispose	Adapt and integrate into future waste diversion theme campaign
Pumpkin Drop flyers	Residents in Pemberton and Whistler (and beyond?)	Responsible disposal of organic waste	Enable	Adapt and integrate into future waste diversion theme campaign
Creating a cleaner Lil'Wat	Lil'Wat community members	Promote recycling and inform of waste services	Enable	Adapt content to fit in updated SLRD brochure template

2.4 Stakeholder Interviews

To further inform our understanding of the current context for the SLRD, interviews were conducted with waste reduction leaders in member municipalities to gather insights into their current and future programs. Table 2-2 outlines the details of the interviews, including a topline summary of identified collaboration opportunities.

Table 2-2 Waste Reduction Stakeholders Interviewed

Name	Organization	Future Waste Projects	Collaboration Opportunity
Rod Macleod	Director of Engineering, District of Squamish	Curbside organic pick up	Improve public education programming
James Hallisey	Solid Waste Services Manager, Resort Municipality of Whistler	Multi-resident organic pick up	Provide consistency in tipping fees, PR campaigns
Steve Hohner	Manager of Public Works, District of Lillooet	<i>Numerous attempts to interview: recommend follow up by SLRD</i>	<i>TBD</i>

Linda Kelly-Smith	Chair, Zero Waste at Squamish Climate Action Network	Curbside organic pick up	Provide consistent branding of waste reduction signage/bins
Caroline Lamont	Development, Village of Pemberton	Improve public understanding of local reduction services	Improve collaboration on local communications projects
Pat Taylor	Operations Manager, Carney's Waste	Construction waste and organic waste diversion	Share costs/benefits of waste reduction with municipal leaders
Claire Ruddy	Executive Director, AWARE	Increase composting	Share broader provincial resources to increase efficiency
Graham Haywood	Lil'wat Nation	Waste diversion education: improved compliance with diversion	Share best practices in public education + by law enforcement + collaboration on communication
Heidi Lessman	SLRD Zero Waste Educator	Waste reduction and diversion education in SLRD schools	Start Zero Waste volunteer team for schools and workplaces
Kara Sockett	Gold Bridge Transfer Station operator	Expanded EPR program to collect more electronics + other recyclables	Increase funding to support better infrastructure + staff

2.5 Communications Material and Interview Analysis

Strategic themes:

- Most materials are designed to support single-family residences with their own transportation within individual SLRD member municipalities, though some were relevant to all municipalities in the SLRD. This distinction was not always clear, and this often made the message confusing.
- Most composting materials enable behaviour: they work well for audiences who are already motivated and informed. At least half the resources reviewed promote backyard composting which assumes an existing strong commitment to waste reduction. The stage of change for the intended audience of these materials is assumed to already be active; the value of the material is unclear.
- Most recycling materials predispose behaviour: they are more focused on informing a broad audience, but don't resolve barriers that a particular segment may be facing. The stage of change for the intended audience of these materials is primarily preparation, awareness and information.
- Most materials reference 5-10 external organizations for additional information: this is overwhelming from an audience perspective and challenging to ensure all are accurate (in fact, a quick review of RCBC information pertinent to the SLRD found broken links back to the municipal websites.)

Communications material gaps:

- Develop playful introductory material: consistent with social marketing best practices, include resources that predispose an audience to learn more (as necessary). The current introductory material isn't particularly captivating (unusual, funny, or special that inspire people to learn more or share with their social networks).

- Create interactive online resources: comment boards, themed regional campaigns, and engaged citizen support. Dynamic online materials will reinforce new positive social norms because they can actively help to remove barriers to change.
- Recognize success: develop communications that celebrate progress and community leadership on the journey to Zero Waste. Find opportunities to demonstrate the “new normal” of waste reduction.
- Provide feedback on progress: increase transparency of waste reduction targets and provide public updates on improvements and regression. Whistler2020 may serve as an example.
- Include materials for different types of audiences: multi-family residences, institutional, or commercial settings. This requires further investigation into potential barriers to change for specific target audiences.

Print materials:

- Design, including graphics and taglines, vary between materials which decreases their impact
- Not clear where print materials are meant to be displayed or who they are targeting
- Uneven degree of information detail for both recycling and composting
- Some included a “neighboring community” alternative, some did not
- Some included motivating information (such as waste reduction benefits), some did not

2.6 PEST and SWOT

At this stage of the communications strategy process, it is useful to consider external influences, including current Political, Economic, Social and Technological (PEST) issues, as well as internal factors related to organizational Strengths, Weaknesses, Opportunities and Threats (SWOT). Our analysis finds the following factors relevant to communications strategy design:

Political:

- Multi-Material British Columbia (MMBC) current changes: may result in some public confusion
- Unclear about when and how the province will advance commercial waste reduction (such as through ensuring extended producer responsibility for packaging and printed paper in the institutional, commercial and industrial sector)
- Timeline also not clearly defined for roll out of other new EPR programs such as carpet, textiles etc.
- Fall election with new four year term
- Potential change in Board members which may change the level of support for regional communications waste reduction and division strategies
- Challenges facing the roles and responsibilities between First Nations, the Aboriginal Affairs and Northern Development Canada (AANDC) and Provincial agencies.

Economic:

- Seasonality/weather issues: waste reduction issues vary over the calendar year in the SLRD. Likely more difficult to get as much public participation in waste reduction over the winter months
- Limitations for curbside collection programs given sparse or intermittent population, snow fall, and wildlife issues; requires more active use of depots which require added personal responsibility for supporting diversion efforts
- Huge variability in economic trends across the region
- Additional costs to provide consistent level of service across the region
- Recycling Council of BC support for SLRD: potential opportunity for increased collaboration

Social:

- Mainly small towns, close communities: both within mainstream communities and First Nations land
- Outdoor/connected to nature culture
- New commitment to collaboration across member municipalities
- First Nations more engaged in solid waste planning
- Young demographic across the SLRD, and often transient in some member municipalities

Technological:

- New interactivity of SLRD site
- Variety of trucking and composting bin options
- Social media channels are already well used in some member municipalities

Strengths

- Networks of member municipalities and citizen advisory committees
- Local community champions + strong NGO leaders
- Committed SLRD staff
- Strong CAO support
- Strong SLRD support
- New and improved website
- Progress by member municipalities on waste reduction

Weaknesses

- Time: no allocated staff person to implement communications strategy
- Municipal waste reduction work is happening independently and not leveraging the potential of collaboration
- Currently no staff person dedicated to leading the solid waste communications in partnership with stakeholders
- Not sure what kinds of information and media people across the region access

Opportunities and Threats are represented in the PEST Analysis above.

2.7 Literature Review

2.7.1 Social Marketing

For the SLRD to communicate effectively there are certain elements that will be required as tools with which to base the programs. These include a brand for solid waste, a website for residents and businesses to find information, a clear structure and mandate, and staff and resources to implement the recommendations. Once these key aspects have been arranged, then the SLRD will be ready to start implementing focused social marketing

programs. These programs can also use the existing resources that the SLRD has developed such as the partnerships for Zero Waste stations at events and the school program (note that these programs should incorporate new SLRD waste reduction branding). Further, participation in community events will be important in communities that are less engaged online (i.e. more northern areas of the SLRD). Offline engagement (face-to-face marketing) is an important way to make the message more meaningful and memorable (see Appendix J for a list of potential events).

A key component of social marketing is to conduct audience research to gain a clear understanding of how the target audience perceives the program or services available. Specifically, social marketing seeks to research what barriers people may have to take action, and what benefits may motivate them to action. The shift from associating discarded materials with garbage requires thinking of these discards as a resource that needs consideration and allocation. The messaging and its delivery must be deliberate in the way it frames the resource management issue; how people think about materials and waste is as important as how they manage it in their homes and communities.

The messaging and tactics will incorporate emerging best practices in behaviour change science, including:

- Social currency: an opportunity to look good with peers
- Triggers: something that is top of mind
- Story: an idea that is worth sharing

The target audience is crucial in providing direction on the perceived barriers and benefits that key stakeholders have with respect to the desired behaviours, such as collecting food scraps at home for deposit at a depot. Barrier identification helped to develop mitigation strategies, including specific messaging recommendations. The communications tools identified in the implementation plan help to reinforce the desired behaviour we seek to foster, creating new “norms” of what is socially acceptable waste management. Testimonials are effective in creating these new norms of behaviour (McKenzie-Mohr, 2011) and the focus group conducted in the development of this plan also indicated the desire to hear stories of how people reduced their waste or managed their own food scraps collection or composting system (the results of the focus group are outlined in Appendix G). Highlighting that the desired behaviour is already being done by a majority of the audience can help build norms and support communications (Goldstein et al. 2008), as fear of acting alone can be a key barrier to behaviour change (Hoggan and Associates, 2006).

Developing visual cues, or “prompts” for the desirable behaviour, will help to develop a positive automatic response or “trigger” for action. Prompts work best when close in space and time to the desired behaviour, such as a sign in a parking lot to reminding people to bring in their reusable bags. Commitment is another important aspect, where asking for a visible public and durable commitment, such as a person’s pledge or agreement to carry out the action that you are promoting, has shown to increase the likelihood of this behaviour occurring (McKenzie-Mohr, 2011). Developing positive waste reduction behaviour requires the communication of relevant benefits, or incentives to take action. Incentives can be used when motivation for the behaviour is low. They should be positive, visible and paired with the behaviour but as the behaviour can stop when incentives are removed, they are best used for short-term behaviour change. Finally, feedback is important and another aspect requested by the focus group. A successful education program needs goal setting and sharing the information with stakeholders (Sheely & Dingle, 2003). It is best to combine feedback with positive approval (McKenzie-Mohr, 2011).

Personal contact is a key way to communicate messages and overcome barriers (Mackenzie-Mohr, 2011). Deeper forms of engagement can occur when waste reduction staff engages with participants as well as with each other. Home visits, workshops, or booths at events can all be ways of engaging the audience in discussions. Campaigns that have a wide range of interventions and approaches tend to be more successful than information alone (Mackenzie-Mohr, 2011).

2.7.2 Communications Channels

With regard to making use of the best communication channels, there are some parallels that can be drawn from other programs with similar goals to change attitudes, increase knowledge and create new behavioural patterns.

A study on how household actions can reduce carbon emissions in the US indicated that a multi-faceted approach was most effective in influencing behaviour change. The report cites interventions that combine a variety of tactics including policy, appeals, mass media, information and informal social influences among others which were felt to be most effective. It was reported that this varied approach could potentially account for a 20% decrease in household direct emissions (Dietz et al, 2009). This finding, to use a variety of communication materials and channels, is not unique in communication planning and will be incorporated into the strategy.

In the 2009 Ipsos Reid survey on awareness of stewardship programs, two key information sources included the Internet, particularly in the Lower Mainland and on Vancouver Island, and local governments. For rural BC, some studies suggest that media habits are slightly different. Statistics Canada and the Canadian Internet Project indicate that while Internet use in rural Canada, including BC, is on the increase, it is still markedly less than more urban areas. Taking this into account, other channels and media will be considered. For example, the 2009 ComBase survey of community newspaper use shows 75% of British Columbians are reading their community newspapers on a regular basis (read the last four issues).

While Internet use has been high among the younger age bracket for some time (Statistics Canada, 2003), Internet use is on the increase across all age brackets including seniors: according to the Canadian Internet Project, more than half of Canadians over 60 use the Internet on a regular basis. Ipsos Reid data shows that Canadians are spending more time online than watching TV: 18.1 hours per week online compared with 16.9 hours watching television.

With the ever-increasing use of the Internet comes the opportunity to leverage social media sites, such as Facebook, used by 65% of British Columbians (Zinc and Dufferin, 2009). The same survey reports that this represents 83% of those aged 18-34, 59% of those 35-54, and 49% of those 55 and up. Interestingly, the fastest growing segment on Facebook is 55-65 year-old females (InsideFacebook.com). What's important about including social media, not just for advertising purposes, is also the opportunity to leverage "friends and family" communications as more trusted sources of information on social media sites, like Facebook (Gupta, 2009). In a 2008 Pollara survey, 80% reported they were more likely to consider buying products recommended by friends, and "word-of-mouth", continues to be a strong and persuasive communication channel (Ketchum, 2009). While most of the SLRD has mobile coverage and access to the Internet, some more rural areas still do not have service.

In addition, good news stories in one media are often picked up by others, expanding audience reach. In addition, working collaboratively with other organizations, such as AWARE, Squamish CAN and RCBC, offers opportunities to use their promotional channels to spread the word. Member municipalities will play a key role in spreading the word through their channels as a known source for recycling and solid waste information. Service providers like

Carney's, Sea to Sky Soils and others also have their own communications channels in addition to the numerous Extender Producer Responsibility (EPR) programs.

The recommended strategy identifies various online tools to leverage partner resources. The plan also provides offline tactics, recognizing that not all community members across the SLRD access resources online. Further, sustainable waste reduction habits will be most effectively replicated if they are publically modelled; public and private sector spaces in communities across the region offer ongoing public education opportunities.

2.8 SLRD Context

The SLRD SWMP targets served as the guide for developing the recommended approach in this strategy. It also takes into account the new Multi Material BC program for packaging and printed paper, the update process for the Solid Waste and Resource management Plan, and the development of a communications plan for the SLRD as a whole. Ultimately, the communications design and promotional distribution are intended to encourage critical thinking when accessing or obtaining material goods (i.e. "Do I really need this?"), but to reduce number of assumptions required by the end user at the point of discarding materials (i.e. "Where do I put this can? What does this sign mean?").

Effective programs help to develop an automatic response to communications prompts because the target audience can easily shift behaviour without needing to pause and reflect on which choice is most appropriate. Further, social marketing research indicates that creating a new social norm requires a multi-faceted suite of objectives, identifying meaningful behavioural, knowledge, and belief targets to achieve change. These are outlined in detail in the Goals and Objectives Section.

Many communications programs focus mainly on providing information as opposed to developing a social marketing strategy, as evident with past SLRD and member municipality efforts. While this communications strategy identifies numerous public education tools, it also incorporates tools that enable change by removing barriers and increasing motivation, and rewards change by providing feedback and recognition. Most important, the entire strategy – including the messaging, illustration, and promotional tactics – was tested in a focus group (results in Appendix G), and the communications materials were adjusted to meet their expressed needs.

3 TARGET AUDIENCE AND STAKEHOLDER IDENTIFICATION

Considering the wide variety of existing communications messages and platforms currently in place in communities across the SLRD, this approach recognizes the unique assets of stakeholders across the region and integrates existing messaging as much as possible. Creating a unifying look-and-feel as well as a source for information for waste reduction and diversion in the SLRD will advance the regional, municipal, and local NGO objectives as well as possibly those of some EPR programs and some local First Nations. The proposed communications messages, partner organizational structure, and collaborative implementation will simplify reaching waste reduction and diversion targets, developing promotional tactics, and administering the logistics for everyone involved. Simplification is critical from an audience perspective, and it will also unlock limited resources now tied up in inefficient systems.

Audiences and stakeholders are those critical to the success of the SLRD's Solid Waste reduction programs. Stakeholders will have an interest in or concern with a given initiative. They may be integral to the program, such

as decision-makers targeted to ensure effective support or residents or businesses targeted in order to influence behaviour, or they may be secondary. Audiences will be a subset of stakeholders. A list of potential stakeholders is listed in Appendix D but additional ones may be included depending on the focus of a program.

Audiences are described as internal and external depending on their relationship to the SLRD, and as primary and secondary audiences or influencers, depending on their level of importance with respect to message delivery. Each audience may have its own set of specific objectives, strategies, tactics, and key messages designed to ensure the message delivered is pertinent to that audience.

It is important to note that there are additional audiences who were consulted throughout the planning process but who have not yet been assigned a formal role in the collaborative implementation of the strategy. First Nations communities across the SLRD are critical stakeholders, and encouraging their active engagement in waste reduction and diversion efforts will help to identify unique barriers and motivating factors. Insights into the challenges and opportunities for waste reduction and diversion in First Nations communities have emerged through the SLRD SWMP Advisory Committee process, such as peer-to-peer influence available through the small and tightly woven communities and emerging sustainability leadership from First Nations youth.

3.1 Segmentation Process

Determining the target audience requires careful analysis of a number of criteria. The ultimate goal is to determine “targets of risk”, those people who are most likely to engage in the problem behaviour, and “targets of opportunity”, those people who are easier to reach or influence. The goal is to prioritize high risk and high opportunity segments, and to define them as narrowly as possible within the available resources. For the purpose of the first phase of this plan, an evaluation of numerous public segments was conducted using the tool shown in Appendix C to identify the target audience. This resulted in selecting mainly urban, single-family home residents as the priority group within the SLRD to reach with updated messaging and communications tools to assist them in reducing and diverting food scraps. The Target Audience Segmentation tool in Appendix C should be used in developing each new reduction/diversion theme program to prioritize the target audience, which could include businesses, institutions, multifamily homes, and others.

3.2 Insight into Audiences and Waste Reduction

In addition to the demographic information presented in Appendix E, some other research shows insight into waste reduction behaviours:

Composting Information from Statistics Canada (2011)

- 61% of Canadian households had participated in some form of composting by 2011 (up 38% since 1994), 45% composted kitchen waste
- Of the those composting kitchen waste, 60% used a curbside collection system, 41% composted at home and 5% had taken it to a depot or some other practice (some people report more than one system)
- Over 50% of households in single or detached dwellings and 22% of those in apartments composted kitchen waste
- Reasons not to compost include: not having a bin, no access to municipal program, concern attracting wildlife to compost bin, takes too much time, takes too much space, not sure what to compost, inconvenient and pickup too infrequent.

- There is a clear correlation between educational attainment, household income and composting of kitchen and/or yard waste
- When all other factors were held constant, percentages of households involved in curbside composting far outweighed those who composted at a depot or a compost pile

McAllister Opinion Research (McAllister, personal communication based on research conducted in BC and Canada)

- In 2011 82% of BC residents were personally concerned about environmental problems and this was reflected in both rural and small cities as well as urban areas. The highest rates were for women under 35 (91%), then women over 35 and men over 35 and the lowest rates for men under 35 (75%).
- When asked to rank environmental issues, resource depletion ranked 47/100, global warming at 45 and waste disposal as 41/100 (the three highest ranked issues were water quality- 62, then air quality -53, then toxic chemicals at 48).
- When ranking the environmental performance in 2011, municipal governments were ranked positively and were seen as superior to provincial governments, federal government and private industry, though less positively than their peak in the mid-90s
- The majority of Canadians buy green saying they had organic food, environmentally friendly products and energy efficient devices in their house or planned to buy them in the next year.
- In a 2011 online survey of BC residents, women were more likely to be the most motivated to recycle (56% versus 41% for men)
- Recyclers that were keener tended to be connected to their community, vote, own a vehicle, have higher income, not worry about money, be aged 45-64, live in detached or semi-detached homes, were often asked for advice, disliked shopping and to some degree were in smaller 2-person households.
- Those least likely to recycle are men under 25, those who like shopping and those not connected to the community.
- When asked about how much effort groups were putting into recycling, people felt they were putting in the right amount of effort themselves (52%; 34% said more than enough) but felt consumers generally (48%), governments (54%) and manufacturers (64%) were not doing enough (and were doing the right amount at 42%, 36% and 29% respectively).
- When asked about what they wanted to know about recycling, they noted knowing where to bring items, what happens to them, benefits (similar to the focus group results for this project)
- Recycling program features that mattered to people a lot were that depots take other kinds of material at the same location (71%) (i.e. one stop dropping) and that it was convenient.
- The top ranked benefits of recycling were reducing toxics to landfill, soil and groundwater (75%), needing less energy when recycled materials are used (62%), reduction in air and water pollutants (58%) and reducing greenhouse gas emissions (55%).
- When presented with facts about the benefits of recycling, women preferred facts on the savings of waste, energy, GHGs and raw materials where men looked at the financial and economic benefits (including job facts) Women also liked ones that were easy to visualize, appealed to their values around good quality of life, improving human health, reducing toxicity, and protecting the environment. Waste diversion from landfill resonated for both men and women.

3.3 Single Family Residence Profile

The audience segmentation exercise conducted with the SLRD prioritized single-family homes as the initial target audience to influence with the first reduction/diversion theme (compostable organics). There are 14,995 households in the SLRD as of the 2011 census (see Appendix E for more details), 31.7% of which are multifamily buildings (apartments and row houses) and 68.3% are single-family homes (including duplexes, mobile homes and

other forms). English is nearly universally spoken so there is no need to translate communications materials into other languages. Further, people who identify as actively recycling materials may be most likely to begin collecting food scraps. This could be useful for future communications efforts from transfer station staff (see Appendix H).

3.4 Future Recommended Target Audiences

The target audience segmentation revealed that the next two top segments were urban multi-family residences and the institutional, commercial and industrial sector (ICI). These two target audience segments will require a different approach than the one developed for the urban single family resident target audience, because they experience different barriers and motivations. While the overall branding should be retained, the reduction/diversion theme messaging will need to be adapted to meet their communications needs.

At the focus group, these two target audiences also emerged as the groups with the greatest behaviour risk and influence opportunity. It may be especially beneficial to pursue the ICI segment in the near future because of the added promotional opportunities available through meaningful partnerships. Providing SLRD waste reduction materials at relevant point-of-sale retail environments (i.e. at grocery stores and/or restaurants during a targeted organics waste reduction/diversion campaign) could significantly increase its impact. However, without genuine support from those private sector partners, including active participation in the communications campaign, the residential target audience would likely overlook the print collateral.

3.4.1 ICI

Across the SLRD, most local residents also work in their home community or within a neighboring community. This expanded connection to the region offers a tremendous opportunity to influence a broader cross section of the community. It also provides a practical avenue for those who are already actively engaged in waste reduction at home to act as leaders and behaviour change role models when they go to work.

Further segmentation of this sector would be recommended, such as: public education institutions; public health institutions; light industry/building and manufacturing; small/medium sized private sector businesses in the service industry; small/medium sized private sector businesses in the retail industry; foodservices, accommodations, etc.

3.4.2 Multi-Family

Across the SLRD, the number of multi-family residences has grown from 13.7% of occupied dwellings in 2006 to 16.0% in 2011 (Statistics Canada census 2006 & 2011). While many strata complexes have rudimentary recycling systems in place, very few have incorporated a holistic approach to waste reduction. At the same time, the demographic profile of multi-family residents includes people who are often younger and likely more connected to environmental stewardship messaging.

3.5 Marketing Mix

While the communication needs of this group will vary across the region due to cultural differences and the availability of waste diversion services, the following marketing mix outlines the foundation underlying the dynamic engagement details in the Section 6 Promotional Tools further below. Social marketing is grounded on an

audience-focused communications strategy, where the product (core benefits) and price (critical barriers) are well understood and are taken into consideration in every aspect of the promotion.

The following list of “P’s” has been developed with organic waste reduction and diversion as the theme; this template could be applied to all future waste reduction/diversion themes to ensure the final promotional tools are audience-focused.

Profile

Snapshot of the target audience demographic:

- Women over 35
- Connected to their community; more likely to vote
- Own a vehicle
- Have higher income
- Live in detached or semi-detached homes
- Were often asked for advice
- Disliked shopping
- To some degree were in smaller 2-person households
- Actively use English language social media tools
- Access to organics diversion options through transfer station drop off
- Often report “time” as major barrier to changing behaviour
- Feel connected to nature and the land, enjoy time recreating outside

Product

Motivators for primary public audience to reduce waste:

- Feeling of being in line with values
- Meeting their personal responsibility
- Sense that this is “doable”
- Saving money (personally if reduced tipping fees and through taxes if extended life of landfills)
- Social norms –seeing that others are doing this too
- Feeling positive reward from contributing to community waste goals
- Behaviour becoming a habit

Price

Barriers to primary public audience to reduce waste:

- Lack of obvious connection to personal values
- Time investment in establishing new reduction/diversion systems at home
- Initial disconnect to new position of waste as a resource, rather than garbage
- Discomfort with handling of household waste; yuck factor; concern over potential for smell
- Higher costs or no direct cost savings to most users
- Inconvenience
- Time constraints due to hours of operation for drop off depots, or time to drive the distance
- Challenges for those without vehicles
- Consumer culture and advertising to buy new

Place

Location of promotional tools:

- SLRD website, with links from municipal and service provider websites
- Transfer Stations signage across the SLRD
- Transfer Stations, Landfill distribution of flyers
- Community streetscape waste diversion bins across the SLRD
- Member municipality and service provider social media channels
- Point of sale/decision locations such as grocery stores, restaurants, garden centres, etc.

4 RECOMMENDED STRATEGY

4.1 Communications Strategy Phases

For ease of organization, the strategy has been divided into six strategic phases described below. Each phase identifies measurable objectives and outcomes. Objectives are SMART: specific, measurable, achievable, realistic and timely. The purpose and outcomes associated with each phase identify the key behaviours targeted (e.g. going to a depot to bring collected food scraps) and specific desired outcomes (e.g. decrease in total waste, decrease in percentage of food scraps in waste). The program phases reflect the order of expected work during the process.

This strategy will outline details for a specific reduction/diversion theme and target audience, which has been selected as the first one to implement based on input from the SWRMP update process and an audience segmentation exercise. However, the intention is that once this program has been implemented, evaluated, and has reached a maintenance stage, staff resources can then be directed to developing the next reduction/diversion theme program or incorporating additional audience segments, such as the ICI as recommended. This next program could include initiatives identified by the SLRD and regional partners, depending on the greatest needs and opportunities. Numerous suggestions have been identified through the SLRD Solid Waste and Resource Management Plan update process. Suggestions are outlined in Appendix B.

The first specific program that will be outlined in the strategy, and which can be used as an example for future programs, is to reduce food scraps in waste from urban single-family home residents. However the basic tools, messaging, visuals, and suggested campaigns will be flexible enough to meet other target audience needs (i.e. institutional, commercial, multi-family residential, etc.). Implementing the communications strategy will ensure that the waste reduction and diversion goals identified in the SLRD SWMP (current and updated versions), as well as the waste reduction and diversion goals of member municipalities, are achieved sooner and with longer lasting effects. By leveraging existing resources, the SLRD can harmonize desired outcomes and improve efficiencies. Perhaps most important, increasing collaboration will produce a more positive user experience.

The Implementation Plan and Evaluation in Section 7 and Action Plan in Appendix H outline recommendations on how best to execute the plan, including a timeline, budget estimates, and objective evaluation criteria.

4.1.1 Phase 1: Develop the Social Marketing Plan

Social marketing usually consists of six stages, each of which involves several different types of activities. The social marketing method will serve as the foundation for the phases that follow, and the method stages are outlined here:

Stage 1 Purpose: **Analysis**

- Prioritize the problem behaviour: choose one of the waste reduction and diversion options identified in the SWMP background research through a collaborative stakeholder-driven process (i.e. involve member municipalities, service providers, and key partners from the beginning).
- Identify priority target audience to reduce problem behaviour using a structured segmentation process (see Appendix C), and supported through primary and secondary research (i.e. existing materials, focus groups, surveys, etc.).
- Determine what the barriers and benefits to performing the behaviour would be for the audience.

Stage 2 Purpose: **Strategy Development**

- Develop a social marketing strategy that forms the foundation on which the rest of the communication program is built to influence the target audience. The strategy is developed to address the barriers and benefits identified in Stage 1.
- Incorporate existing organizational assets and begin to establish necessary resources, such as funding sources and strategic partnerships.

Stage 3 Purpose: **Program and Communication Design**

- Develop messaging based on key program objectives.
- Create any new promotional communications materials necessary and establish new partnerships.

Stage 4 Purpose: **Pretesting**

- Understand target audience barriers and motivations for reducing problem behaviour. This can be done by holding a focus group with the target audience in conjunction with using existing research.
- Pilot strategy in two or three locations and adjust as necessary.

Stage 5 Purpose: **Implementation**

- Roll out across the region and measure effectiveness.
- Monitor program to allow for adaptation as necessary.

Stage 6 Purpose: **Evaluation**

- Report against progress in achieving identified objectives with all stakeholders, including target audience to increase transparency and long-term engagement in the process.
- Use a combination of qualitative and quantitative evaluation criteria.

4.1.2 Phase 2: Develop Tools

This phase involves developing tools that will be needed to implement a program; building on Stage 3 (program & communication design) recommendations in Phase 1 above (developing the social marketing plan). Initially, it will

also include the development of standard tools that can be used for all SLRD programs which partners should use wherever possible. This includes a website, standards for signage, standards for bin colours and labels, a brand and logo, distribution lists for sending information to different stakeholder groups, and standard messaging. In some cases, these tools may also include ones that are not directly communications-related but address a barrier noted by the target audience (for example, the need to change hours of operation or provide kitchen catchers).

Purpose: All internal and external decision makers and opinion leaders are made aware of the new tools. Where suitable, they are encouraged to link their websites to SLRD website for solid waste reduction and diversion information. Opportunities for co-branding can be explored.

Outcome: Internal and external decision makers are prepared for the solid waste information requests.

Outcome: Member municipalities, service providers and ENGOs website link to the SLRD Solid Waste webpages.

Outcome: SLRD communications for solid waste use the brand and standard messaging.

4.1.3 Phase 3: Program Notification

Purpose: All internal and external decision makers and opinion leaders are notified of the program's progress and launch date by (insert date).

Outcome: Internal and external decision makers and opinion leaders are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with internal and external decision makers and opinion leaders.

Purpose: All external program partners are notified of the program's progress and launch date by (insert date).

Outcome: Service delivery is coordinated between existing service providers and the SLRD.

Outcome: Program partners / service providers are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with external program partners / service providers.

4.1.4 Phase 4: Program Announcement

The program is launched during this phase. Stages 4 and 5 of Phase 1 Social Marketing strategy above are expressed in Phases 4 and 5.

Purpose: Notify all stakeholders of program commencement including messages about how to “find depot near you”, smart storage, and transport. (The purpose will be tailored to the specific program.)

Outcome: Stakeholders are aware of program commencement and know where to find information about the program.

Purpose: Prepare internal audiences and external program partners for public information requests prior to program announcement.

Outcome: Program partners provide consistent and correct information to potential program users.

4.1.5 Phase 5: Program Promotion

Purpose: Increase public participation in the priority waste diversion or reduction project.

Outcome: Target audience actively uses the SLRD waste diversion services available or adopts the desired behaviours.

Outcome: SLRD waste volumes decrease.

4.1.6 Phase 6: Evaluation and Ongoing Communication

Purpose: This phase focuses on measuring the effectiveness of the program and the development of ways to improve it as well as strategies for ongoing communication and evaluation. Phase 6 corresponds with Stage 6 of Phase 1 Social Marketing strategy above.

Outcome: Meet SLRD waste reduction or diversion goals determined by the SLRD SWMP process or a sub-goal developed in the program development process.

Outcome: Identify if there is a need to modify or enhance the program based on results.

5 BRANDING & MESSAGING

The brand developed for SLRD solid waste communications includes an umbrella graphic and tag line. While we explored integrating Zero Waste messaging, the focus group research clearly recommended use of the term “Zero Waste” for policy and direction but not for primary public messaging until there is a higher level of acceptance and understanding of the term.

The final icon can be found in Appendix L, which has tremendous application potential in various public spaces across the region. The final tagline, “Love this place. Reduce your waste” can be incorporated into waste reduction/diversion theme messaging (see below).

5.1 Guidelines for Developing Reduction/Diversion Theme Messaging

Advancing waste reduction in the SLRD will be most successful if the waste reduction communications efforts can be narrowed to a single diversion theme at a time, targeting a single (or narrowly defined) target audience.

Allowing each waste diversion theme to have its own “flavour” will help to keep the original brand fresh and interesting for target audiences. Specific messaging will be most effective if it includes the following elements:

- Easy to remember: Short, clear, concise and without jargon or technical language
- Proof of impact: tangible feedback shared often

- Congruence with love of place: the way we take care of our community needs to align with what we tell other people about where we live
- Explain the need: what's the connection to the bigger impact
- Make it personal: what's in it for me
- Create a local analogy or story: something we do here because we believe in the long term benefit
- Empowering to do the right thing: my actions make a difference
- Something unexpected: catch and hold attention
- Positive norm: It's what most people here do already; include public opinion statistics
- Local environmental benefit (i.e. habitat protection), and global environmental benefit (i.e. climate change)

5.2 Food Scraps Reduction Messaging – A Working Example

The focus group research indicated that people perceive food scraps collection as much more challenging and time consuming than recycling. Participants also indicated that food scraps collection is a behaviour taken by individuals who are already highly successful in other aspects of waste reduction.

Messaging will be most successful if it dispels some myths about food scraps collection that have become barriers to action; if it provides communication that affirms existing environmentally aware identity; and if it shares motivating information that is emotional and surprising.

A sample design is shown below.



WE'VE COME A LONG WAY BABY.

Remember when *this* was the best we could do?

Do you tell everyone how great it is to live here? We have it all – fresh air, the great outdoors and fun people to share it with. Want to keep it that way? Start collecting food scraps and dropping them off at your local transfer station. Food scraps make up a lot of the garbage going to landfills and landfills cause climate change. Earn your bragging rights about what it means to live here, and **start collecting food scraps today**. It is easier than you think. Need help getting started? Visit www.slrd.bc.ca/lovethisplace.



Some facts that may reinforce messaging are:

- The majority of Canadian households already participate in composting activities (up 38% since 1994); collecting food scraps and bringing them to the depot means that you're on the winning team
- Canadians throw away 90kg of food per person per year (Chapman, 2011) which is 40% of our food supply, 51% of which comes from homes (CBC, 2012)
- Wasted food represents wasted resources that went into producing the food: land clearing, energy, fertilizer, pesticides, fuel for transport and equipment and water
- Key reasons for wasting food are buying too much food, buying more perishable products, not eating food based on what needs to be used first, cleaning out cupboards, food hygiene reasons and dates on food labels, making too much food and dislike of the taste of food (especially by children) (Brook Lyndhurst, 2007)
- Organics in the landfill produce methane, a powerful greenhouse gas

6 PROMOTIONAL TOOLS

There are a variety of promotional communications tools and channels that can be used to advance waste reduction goals. These may be standard ones used as a base for multiple programs or ones only used for specific programs. Some will be created and then remain relatively static, while others may be more dynamic and change frequently or be one-time events.

It is important to note that using tools developed and tested by other local governments can save resources. There is a website, www.3Rs.ca, developed by Metro Vancouver and others promoting waste reduction that allows users to take the tools that have been developed and brand them with their own information as well as share their own. There are also some standardized signs that they are encouraging communities across Canada to use so that it becomes easier for all residents to recognize them.

Common tools are noted below as well as dynamic ones that engage the audience more directly:

Depots

Signage for materials should be standardized. For packaging and printed paper, it is meant to complement new MMBC signs; intended to “translate” service provider and provincial program details with an over-arching simple call to action. (Consider attendant training and approach, may wish to start with fun and educational, recommend clear bags, make them be seen as a way to fast track to Zero Waste rather than police).

Streetscape Bins

New decals will help simplify what-goes-where when people are in the community². The long-term recommendation is to use similar-shaped lid-openings and colour-coded bins across the region. Existing bins could be repainted to align material types with specific colours. Efforts should be made to use slot shapes that indicate what type of material should be discarded in the bins.

Curbside Decals

Service providers can distribute decals for residents to place on the appropriate curbside bins where residents provide their own bins or to be affixed to bins when they are delivered to the resident where the service provider provides the bins. Where there are details on what kinds of materials go in the bin or not, these details could be included on an additional sticker on the lid. Best practices for signage for these first three tools are outlined in Appendix F.

Web

The website should have a fun and friendly tone that reinforces the existing new norm of Zero Waste. Social marketing science is clear about the need for communication to create the impression that most people are already engaged in the desired behaviour. In addition, with the SLRD’s role as an information hub, the website will need to provide the information for residents and businesses to assist them in reducing and diverting waste. This will include the basics of what, when, where and how. For more keen users, it may include more details in

² Signage graphics could be made available to local organizations as some already are making their own unique signs (which can add to the confusion). The SLRD could provide something like San Francisco’s sign maker - <http://www.sfenvironment.org/signmaker>.

additional links. First Nation Communities may wish to use the co-branding opportunities mentioned above to relate information within their communities.

Print Media

There is an opportunity to share feedback with the target audience on their progress towards achieving waste reduction and diversion targets, and to profile community Zero Waste leaders. There are some robust local papers that focus group participants noted they read and would appreciate some stories providing feedback on community progress towards Zero Waste, tips on what to do and stories about local waste reduction champions or people who are making an effort to reduce waste and what they learned. Some story ideas are listed in Appendix K. In addition, earned media can be a great way to convey key messages in a cost effective manner. Earned media are journal articles that reinforce the desired message. An example would be a feature story about how a local resident started actively reducing waste through food scraps collection, and how she has benefited.

Radio

Radio can also be an effective medium for some groups. For both print media and radio, there may be opportunities to provide information for public service announcements which can keep costs low if they meet specific criteria as well as opportunities to leverage earned media.

Printed Materials

For some audiences printed materials can be useful. In some cases, they can be used for larger groups or be small in size but provide a way to remember a website or can be a reference guide for information pertaining to reducing waste. Utilising existing community newspapers and newsletters can be an effective way to reach large audiences and specific communities.

6.1 Dynamic Engagement

Creative promotions

Recognition of positive waste reduction and diversion behaviours will help to reinforce an emerging Zero Waste norm in the SLRD. Research shows that recognition efforts are most effective when in close proximity to the time and place of the desired behaviour. Empowering local service providers at transfer stations to reward waste diversion efforts (see Role of Stakeholders Section 7.1 for details) will help to build a “customer service” culture among service provider staff, and reframe the transfer station experience as a place to learn about community stewardship.

Social Media

Municipal partners, local NGOs, and service providers actively use a variety of social media tools that will assist the SLRD in reaching the key target audience, such as Twitter, Facebook, and YouTube. The most common issue facing public organizations who initiate social media campaigns is how to effectively maintain them. For this reason, the most efficient and strategic choice for the SLRD is to support existing stakeholder tools. Rather than developing SLRD branded channels, develop a weekly story, tip, or update on regional waste reduction and diversion goals for partnering organizations to post as well as on their own pages/sites. In this way, existing resources can be leveraged and the public can be more effectively engaged.

Special Events

Integrating communications tactics with existing community events across the region will support the SLRD in a number of ways, including:

- Increasing relevance of SLRD message to local community members
- Building stronger relationships with local community leaders
- Providing access to new target audiences
- Improving efficiency of SLRD resources, related to both staff time and marketing costs

Engaging in face-to-face marketing is an important way to build relationships with the target audience(s) and better understand their communications needs. Talking directly with the people whose behaviour you wish to influence helps to reinforce the importance of the message, and provides greater word-of-mouth marketing opportunities.

Waste diversion is already promoted through interactive displays during the Farmer's Market season (approximately June through October) in Squamish, Whistler and Pemberton. The music concerts, children's festivals, and other major events would all benefit from a coordinated and consistent waste diversion and reduction program, which could reduce waste at the event but also teach participants about waste diversion options.

See Appendix J for listings of events, how to select which events to participate in and the event toolkit. Utilising already established community events and collaborating with local event planners will provide the most efficient integration. Appendix M has a sample pledge card that could be used to get commitment at events as well as to build the social norms by making these public.

School Programs

Stakeholders across the region supported the continuity of the intermediate elementary school program. This communications approach may be especially effective in reaching the single family and multifamily residence target audiences.

Seasonal Campaign

Interactive communications efforts that allow for face-to-face conversation, games, and rewards have the greatest potential to create word-of-mouth marketing. Social marketing research indicates that people share information through stories, and that they are most likely to act on the information shared by people closest to them. By selecting one key reduction/diversion theme that involves interactive communications to focus on once a year, the SLRD and regional partners can concentrate resources and continue to drive change and leverage earned media.

Background research for this strategy indicated that regional partners would like to coordinate communications efforts around the organic waste reduction/diversion. The SLRD has the opportunity to harmonize organic waste reduction and diversion communications, and future reduction/diversion efforts could follow this kind of format.

Implementing an annual campaign to increase target audience participation in organic waste reduction and diversion will require strong partnerships with key stakeholders (see next section for details on how to foster stronger collaboration). More public engagement is possible because there are now attendants at all transfers and landfill sites run by SLRD and municipalities within the SLRD, and these staff can talk with the public about their personal waste management choices. The role of the people at the "front lines" of waste management – those

who work at transfer station and landfills – has the potential to be expanded and their new “green job” status is likely to become a source of pride.

We recommend building capacity with the municipal partnerships by co-leading one prototype pilot project before the end of 2014, such as the existing Pumpkin Drop campaign. There are at least two reasons for this recommendation. First, it will provide an opportunity for partner collaboration on a project, where the upfront investment of time is low because communications materials are already designed in member municipalities in many cases. In this way, the partner organizations have an opportunity to enjoy early success working together. Second, it will help to identify any organizational issues that need to be resolved before the launch of future communications campaigns.

7 IMPLEMENTATION PLAN & EVALUATION

The implementation plan noted here discusses who will implement the plan, the budget and how to evaluate its effectiveness. The more detailed Action Plan for each of the 6 communication strategy phases is in Appendix H. It looks at the tactics, the specific timeline and how to evaluate it. Where applicable for some tactics, the objective it addresses (knowledge, belief or behaviour) is also noted.

7.1 Role of Stakeholders

7.1.1 SLRD Role

The communities within the SLRD have diverse demographics and geography. While this variability poses a communications challenge on many levels, the SLRD staff and political leaders are positioned to identify and promote regional collaboration opportunities. In addition, it is most practical for SLRD staff to actively participate in provincial waste reduction/diversion programs, including processes to develop new resource management targets, EPR consultations, carbon off-set strategies, and any other Zero Waste initiatives. The SLRD can share relevant information on new initiatives and research with their member municipalities and stakeholders.

Policy Initiatives

There is a clear need for more sharing of resource management bylaw design and other structural regulatory tools to assist with improved waste reduction/diversion. While the focus of this communications strategy is on reaching the large residential target audience, a variety of mechanisms are available to influence additional segments, such as:

- Specify diversion language throughout SLRD, including transfer station and streetscape containers
- Change collection services for ICI, multi-residence dwelling units, and tourist accommodation buildings to require recycling and compost options in addition to garbage services. In some municipalities, these organizations could qualify for waiving of fees (such as those in utility fees or property taxes).
- Work with service providers to actively enforce the disposal bans and strengthen penalties for loads with divertible materials
- Encourage the use of clear bags to make it simpler for waste attendants to provide coaching
- Develop a simplified special events check list and require specific waste reduction parameters for municipally-sponsored events

- Show leadership by developing policies and implementing them internally (such as waste reduction systems or sustainable purchasing policies).
- Encourage larger ICI organizations to adopt or adapt sustainable purchasing policies, and develop sustainable purchasing toolkits
- Require new real estate developments to provide space for proper separation/collection of recycling and organics for ICI and multifamily
- Add resources to more actively enforce existing bylaws and guiding policies; this could also include positive reinforcement options, identified in this strategy

Organizational Structure

The SLRD is a small regional government compared with some others in BC, and continues to face the challenge of managing numerous social, environmental and economic projects with limited resources. Assuming a more strategic role in the region must be balanced with hands-on coordination of services in smaller member communities.

To assist in developing a balance between oversight and implementation, the following actions are recommended:

- Establish clear division of SLRD staff responsibility for operations management and regional strategic planning so strategic advances and actions can be made without delays due to urgent operational needs. This can be achieved by having one position dedicated to solid waste communications, reporting to the Director of Utilities and Environmental Services and collaborating with the rest of the solid waste team.
- Host annual waste reduction/diversion communications planning workshop with regional communications and waste management staff to ensure coordinated timelines, goals and campaign tactics.
- Secure communications strategy implementation commitment from both municipal partners, First Nations, and service providers. This can be best achieved through the current Advisory Council process.
- Develop a program-specific working group to plan and actively support implementation of specific programs.

It is recommended that the SLRD create a position to coordinate solid waste communications for the region and to work with partners to implement this plan. This position would be responsible for implementing the action plan, potentially in collaboration with or combined with the current scope of the Zero Waste Educator. However, as there is increasing work with partners, future reduction/diversion themes may see larger roles taken by partners depending on the projects.

7.1.2 Municipal Role

Municipalities also have control over how hauling, processing and other service provider contracts are developed, and can specify communications and outreach messages and actions that connect them to reduction/diversion programs and targets. Municipal leaders will also be most effective in advancing a distributed leadership model of citizen engagement that capitalizes on municipal communications tools and local citizen engagement. Distributed leadership is about grassroots, citizen-led programs where local and regional government leaders support the existing social capital in their communities (such as distributing branded public awards for waste reduction efforts). Further, social marketing strategies are most effective when they include peer-to-peer influence. By working in partnership with local NGO waste organizations, member municipality resource managers can reinforce the growing new norm of improved waste reduction and diversion in their communities.

In the development of this plan and in the ongoing work of implementing the SWMP and the process of updating the SWRMP, the groundwork has been laid for closer collaboration. Member municipalities already participate in the Solid Waste Plan Monitoring Committee and now in the update process of the SWRMP. These meetings have built a relationship between the SLRD and the municipalities which can be enhanced by further partnership. It makes sure all partners are aware of new proposals and programs and that ensures local conditions are taken into account in program and education development.

7.1.3 First Nations Role

While not under the jurisdiction of the SLRD and not municipalities, First Nations communities also need to plan for and provide services for solid waste. They may use SLRD solid waste services (such as landfills) and have a common interest in reducing waste and diverting resources from landfill. As such, the SLRD can work towards stronger partnerships with local First Nations in a similar fashion as with the member municipalities (working together on common communications, inclusion in planning meetings, sharing of resources, etc.).

7.1.4 Service Provider Role

Critical to the success of this strategy is support from private sector agencies providing both curbside pick-up and transfer station management. These agencies are often the main conduit for public engagement and as such have a special role to play in reinforcing positive behaviour. Opportunities for public engagement include: asking for public commitment to waste reduction on branded postcards and then having an interactive display at transfer stations. Each month the service provider company could choose one recipient to profile on social media channels. Random draws for prizes are encouraged from the pool of submissions. In some cases, local NGOs may also play a similar role.

7.1.5 Shared Responsibility

Recognizing the value of region-wide consistency in messaging, the SLRD, member municipalities, First Nations communities, service providers, and community NGO's are recommended to commit to the following:

- Provide input on and adopt one signage design, then replace or update existing signage throughout one calendar year
- Re-locate diversion containers at transfer stations and depots to make them the most convenient choice; move mixed waste bins to the back of the properties
- Recommend all streetscape, business and multi-family collection bins to be grouped, and placed in consistent ordering as much as possible (e.g. no solo garbage or recycling containers)
- Share SLRD promotional messages on social media channels regularly
- Actively participate in annual strategic planning sessions
- Simplify bylaw process through developing standardized language and sample bylaws that can more easily adopted by councils (i.e. space requirements for recycling containers in strata buildings, requirements for front and back of house at businesses, requirements for deconstructing buildings)
- Pilot programs in different communities to gain lessons learned and inform broad scale regional program development and implementation
- Orient and train attendants and front line staff on current situation, and encourage them to actively promote new programs

7.2 Food Scraps Reduction Campaign Snapshot

Building on the knowledge, belief and behaviour objectives identified for the program, a two-part campaign to promote food scraps collection has been developed. While this timeline would be best followed in sequence, it would be possible to begin in Part 2 if necessary due to budget and hiring restrictions. Working through the Action Plan outlined in Appendix H will help to identify a logical starting point that is sensitive to the current context.

Part 1: Pilot -September/October: Integrate the newly branded SLRD waste reduction messaging into existing initiatives by:

- Reinforcing food waste avoidance and organics diversion messaging by incorporating it into existing Halloween pumpkin drop promotions in one or two partner municipalities. By priming the target audience with this food scraps messaging in the fall, the larger spring campaign can build on existing positive behaviour. This will be a pilot activity.

Part 2: Roll out starting April/May: Actively promote food scraps reduction/diversion by:

- Featuring food scraps-focused information that builds on implementation of guiding SLRD branded communication (providing food scraps collection tips online to introduce behaviour change). Tips should include bin recommendations, meal planning tools, how-to videos, etc.
- Coordinate with transfer station staff to focus feedback and support on food scraps diversion: special training provided in advance of campaign. Critical to include before and after feedback about food scraps diversion, and the results of the increased public participation in waste reduction, both at the transfer stations and through online channels.
- Providing branded food scraps bins (removing barriers to enable behaviour change) in exchange for public commitment to experiment with food scraps collection (post public commitments at transfer stations “wall of fame”. Potential to partner with local ice cream businesses to give away bins, and provide gift certificates to receive ice cream to all “waste reduction heroes”. Emphasize a “wrap your scraps” with newspaper to overcome collection and transfer challenges.
- Hosting a weekly “waste reduction hero” contest (providing rewarding communications to reinforce behaviour change). To participate, people nominate a “waste reduction hero” with a photo and story and post it on SLRD Facebook site. Winning waste reduction story featured in the News section of SLRD website, and winner awarded donated prize (potentially ice cream). Ideally nominations would include both regular citizens as well as higher profile community members including but not limited to politicians and other community leaders, professional athletes who live in or use training facilities in the area.
- Campaign promotion: through municipal partner online channels; with transfer station staff; through earned media; through targeted bought ads in local newspapers; and most effectively, through word of mouth generated by free ice cream.

Further details about how to implement this campaign are included in Appendix H which includes the preparation, announcement, launch and evaluation phases.

7.3 Resources Required

Waste reduction and diversion will continue to be a major challenge and opportunity for the SLRD. Investing in the implementation of this communications strategy is critical to achieving the SLRD SWMP. The minimum level of investment to ensure the successful implementation of this strategy requires a dedicated part time staff person for three days per week. It may be beneficial to subcontract some of the tasks, such as the more tactical actions like

coordinating the production of updated signage. This will ensure that the SLRD can continue to provide a single point of contact for municipal stakeholders, assume senior level responsibility for coordinating regional waste reduction/diversion programs, and have the staff resources to leverage partnerships with municipalities, ENGOs, service providers, and other potential partners over time. The actual activities to be performed by this dedicated staff person are outlined in the Action Plan in Appendix H (with some time requirements noted but additional time will be needed for all the small detailed actions not included as well as for the work with partners which will vary based on the number of partners and their availability). Planning level resource requirement examples are outlined in the table below.

Table 7-1 Budget for Resources

Resource	Estimated First Year Budget
SLRD Solid Waste Communications Coordinator (plus additional benefits and overhead) ³	\$33,000
Ambassador stipends for special events (10 events per year, average 2 ambassadors per event, \$100 stipend each including training (in-kind entrance fee or other may be possible depending on the event))	\$2,000
Printing for wallet cards (\$1,125 for 2,500 but cost per card lower if more) –changes to template may be possible by printer with no additional fee. Considered runs for Pemberton, Lillooet, Gold Bridge and Devine; could partner with Squamish and Whistler to have consistent look for those communities also but costs for these communities are not included.	\$4,000
Printing of pledge cards (for 5,000 in postcard format)	\$1,300
Print banner for displays (2 at \$250 each)	\$500
Branded tent for events (10' x 10' aluminum)	\$1,300
Kitchen catchers for food scraps diversion (note there may be different needs for future themes) (3,800 containers to reach 10% of SLRD population at an average of \$6.50 each, offset cost by donation of reusable containers, introduced across recycle depots)	\$24,700
Home container recycling and food scraps decals (5,000 quantity, 50 cents per sticker)	\$2,500
Sign production for SLRD waste locations (4 sites, 8 signs per site, weatherproof and durable)	\$2,000
Newspaper ads (\$400 per ¼ page ad in 5 local papers, twice per year)	\$4,400
Total	\$75,700

The cost Solid Waste Communications Coordinator depends on the staffing capacity of the member municipalities to assist with this campaign.

7.4 Expected Outcomes

Evaluation creates credibility and will help to improve communications as well as the programs and services offered. By identifying what works and what doesn't work, resources can be focused on the most effective communication channels and tools and eliminate or reduce other components. Evaluation typically consists of monitoring, process and program evaluation and links back to the communication objectives.

Evaluation needs to be planned and have resources to conduct it. Deciding in advance what can be tracked and what resources (staff and/or financial) are required will help ensure the information can be collected and in turn

³ Note this rate is the industry standard, verified by contacting organizations with similar positions.

used for continuous improvements. As well, using the information gained will help avoid problems, identify opportunities and create more targeted and effective communications.

Social transformation is a long-term process that requires persistence. Committing to the strategy, including the messaging and the implementation recommendations, will yield the best results. Behaviour change is challenging to measure, and we caution the tendency to draw correlations between planned interventions and observed changes in public behaviour. Most social marketing programs target a 5% rate change within 2-3 years based on focused and consistent communications programming (Kujawski, M. 2009).

7.4.1 Process Evaluation

Before implementation begins, monitoring mechanisms are put in place to retrieve feedback on the program and to catch any problems in their early stages. Although it's unlikely to anticipate every type of problem, a monitoring system will help to identify problems as they may arise during implementation. Most problems can be resolved if detected early enough, but left unchecked, can mean the difference between success and failure of the program. Effective monitoring of public and key stakeholder response involves staying on top of trends in the program's activities and ensuring that implementation is on the right track toward accomplishing program goals.

Process evaluation should include tracking questions and feedback to the SLRD, member municipalities, program partners and RCBC by type of inquiry and by location. RCBC can be asked to provide hotline call and website tracking. Surveys could be conducted to ask how a person heard about the program. Monitoring should also include feedback from the waste attendants. Internally, maintaining open lines of communication between departments will also assist in identifying and responding to issues as they arise.

A key aspect of process evaluation also includes ensuring the plan is being implemented on time and on budget, and making adjustments as necessary. See Appendix H for action plan details.

7.4.2 Qualitative Success Measures

Identifying key milestones along the social transformation journey is critical to maintaining momentum and partner support.

These success measures should include:

- Increased regional capacity to collaborate in solving other sustainability issues (i.e. habitat restoration economic recovery planning, affordable housing, etc.)
- Improved efficiency in SLRD Utilities and Communications Departments: active stakeholder participation in SLRD-led strategic planning events
- Feedback from partners and public (including verbal comments, feedback forms at workshops)
- Phone calls and inquiries to the SLRD and partners
- Online surveys
- Future focus groups

7.4.3 Quantitative Success Measures

The communications plan should assist the SLRD in reaching its waste reduction and diversion targets. These targets will be finalized in the SWRMP update process.

These success measures should include:

- Number of transfer station, streetscape, and curbside infrastructure across the SLRD with updated unifying branding
- Number of times standard signage is downloaded from website
- Amount of public engagement in social media waste reduction/diversion stories
- Number of media stories on waste reduction/diversion (i.e. growing public interest in resource management)
- Greater use of organics diversion services at the transfer stations reported by staff
- Reduction in waste (total waste, per capita disposal rate; ideal if data can be disaggregated to show impact of a specific program on a population – be it event or municipality)
- Actions completed in the Action Plan
- Hits to website or social media (both SLRD and key partners)
- Number of participants at events
- Number of wallet cards given out
- Number of pledges signed
- Number of committed partners
- RCBC hotline and Recyclepedia statistics from SLRD region users

7.4.4 Providing Feedback

Research shows that providing public feedback on program goals can help build community norms. This should be done for this program as well as subsequent reduction/diversion themes. Different tools can be used for different audiences. Suggested actions for providing feedback are included in the action plan

APPENDIX A: WASTE REDUCTION/DIVERSION AND COMMUNICATIONS RESEARCH

Communications

Canadian Internet Project (2008) – Canadian Internet Project Launches Report From Second Phase of Study on Canadian Internet Habits. Accessed at <http://www.ciponline.ca/en/publications.htm>.

Dietz et al, 2009 – Household actions can provide a behavioral wedge to rapidly reduce U.S. carbon emissions. Accessed at <http://www.pnas.org/content/early/2009/10/23/0908738106>.

Fostering Sustainable Behaviour, Community-Based Social Marketing (2010) – Articles, Cases, Strategies, Forums <http://www.cbsm.com/public/world.lasso>

Goldstein, N.J., Cialdini, R.B. and Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, 35(3), 472-482.

Harvard Business School, Sarah Jane Gilbert, Sunil Gupta (2009) – Social Network Marketing: What Works? Accessed at <http://hbswk.hbs.edu/item/6187.html>.

Hoggan and Associates (2006), *Communicating Sustainability*. Accessed at <http://www.hoggan.com/sites/default/files/Hoggan%20Sustainability%20Choice%20Dialogues%20Report%202006.pdf>.

Ipsos Reid – Canadians Prefer PC to TV <http://www.cbc.ca/canada/british-columbia/story/2010/03/22/consumer-tv-online-web-internet-viewing-habits.html#ixzz0j4Ez8JQ5>

Ipsos Reid for Ministry of Environment (2009) - Consumer Awareness of Industry Led Product Stewardship Programs in BC. Accessed at <http://www.env.gov.bc.ca/epd/recycling/resources/reports/cas/pdf/ipsos-reid.pdf>.

Ketchum's Online Magazine – Media Myths and Realities http://ketchumperspectives.com/archives/2009_i1/key_findings.php

Kujawski, M. (2009). *Guide to Branding in the Public and Non-for-profit Sectors*. Accessed at http://www.mikekujawski.ca/ftp/cepsm_branding_ebook.pdf.

McKenzie-Mohr, D (2011). *Fostering sustainable behavior: An introduction to community-based social marketing* (3rd ed.). Gabriola Island, BC: New Society.

Savelson, Wynesberghe, Frankish and Folz (2007). Application of a health promotion model to community-based sustainability planning. Accessed at http://www.tandfonline.com/doi/abs/10.1080/13549830500321832#.U8_m_VbYeDE.

Sheely, L. & Dingle, P. (2003). *Goal setting and sustainability: Living smart in the city of Freemantle*. Retrieved from www.sustainability.dpc.wa.gov.au

Statistics Canada (2003) – Canadian Social Trends. Keeping up with the times: Canadians and their news media diet. Accessed at <http://www.statcan.gc.ca/pub/11-008-x/2006008/9610-eng.htm>.

Weinreich, Nedra (2011). *Hands-On Social Marketing: A Step-by-step guide to designing change for good- 2nd edition*. Thousand Oaks, CA, SAGE Publications.

Zinc Research and Dufferin Research (2009) – Canadians and Social Networking Sites. Accessed at <http://www.zinc-tank.com/include/get.php?nodeid=23>.

Waste Reduction and Diversion

Brook Lyndhurst. (2006). Waste Watch. *WR0504: Establishing the Behaviour Change Evidence Base to inform Community Based Waste Prevention and Recycling*. A project for DEFRA's WRAP. Retrieved from http://randd.defra.gov.uk/Document.aspx?Document=WR0504_5409_FRP.pdf.

CBC, 2012. What a waste. Accessed at <http://www.cbc.ca/strombo/news/what-a-waste-new-study-says-canadians-waste-27-billion-worth-of-food-every->.

Chapman, S. (2011, June). Globe and Mail. *How to save money on food? Quit wasting it*. Retrieved from <http://www.theglobeandmail.com/globe-investor/personal-finance/household-finances/how-to-save-money-on-food-quit-wasting-it/article2042905>.

District of Lillooet (2009). Official Community Plan. Accessed at <https://lillooet.civicweb.net/Documents/DocumentDisplay.aspx?Id=1058>.

District of Squamish (2010). Comprehensive Solid Waste Strategy. Accessed at <http://squamish.ca/assets/Comprehensive-Solid-Waste-Strategy-3.pdf>.

MacDonald, N. (2009, November 9, 11:24am). What a waste. Accessed at <http://www2.macleans.ca/2009/11/09/what-a-waste/>.

Resort Municipality of Whistler (2013). Solid Waste Management Strategy. Accessed at Resort Municipality of Whistler (2013) Solid Waste Strategy

Squamish-Lillooet Regional District (2007). Solid Waste Management Plan. Accessed at <http://www.slrd.bc.ca/sites/default/files/pdfs/UES/recycling-composting-solidwaste/SWRMP/SLRD%20SWMP%20final%2018%20April%2008.pdf>.

Squamish-Lillooet Regional District (2013). Integrated Sustainability Plan. Accessed at [http://www.slrd.bc.ca/sites/default/files/pdfs/SLRD%20ISP%20\(FINAL2\).pdf](http://www.slrd.bc.ca/sites/default/files/pdfs/SLRD%20ISP%20(FINAL2).pdf).

Squamish-Lillooet Regional District (2014). Technical Memo-Waste Diversion Options for the Northern SLRD. Accessed at http://www.slrd.bc.ca/sites/default/files/pdfs/UES/recycling-composting-solidwaste/SWRMP/TM1_Waste%20Diversion_North_29%20May.pdf.

Squamish-Lillooet Regional District (2014). Technical Memo-Waste Diversion Options for the Southern SLRD. Accessed at http://www.slrd.bc.ca/sites/default/files/pdfs/UES/recycling-composting-solidwaste/SWRMP/TM1_Waste%20Diversion_South_25Feb2014.pdf.

Squamish-Lillooet Regional District (2010). Regional Growth Strategy. Accessed at <http://www.slrd.bc.ca/sites/default/files/pdfs/BL1062.pdf>.

Whistler 2020 (2010). Descriptions of Success for Materials and Solid Waste. Accessed at <http://www.whistler2020.ca/whistler/site/strategy.acds?instanceid=1930592&context=1930591>.

Other

Statistics Canada (2011). 2011 Census results for the Squamish-Lillooet Regional District. Accessed at <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=5931&Geo2=PR&Code2=59&Data=Count&SearchText=Squamish-Lillooet&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=5931&TABID=1>.

Statistics Canada (2011). Composting in households in Canada. Accessed at <http://www.statcan.gc.ca/pub/16-002-x/2013001/article/11848-eng.pdf>.

Statistics Canada (2006). 2006 Census results for the Squamish-Lillooet Regional District. Accessed at <http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/details/page.cfm?Lang=E&Geo1=CD&Code1=5931&Geo2=PR&Code2=59&Data=Count&SearchText=squ&SearchType=Begins&SearchPR=59&B1=All&Custom=>.

APPENDIX B: SUGGESTIONS FOR FUTURE COMMUNITY-BASED SOCIAL MARKETING PROGRAMS

These suggestions come from the audience segmentation process conducted as part of the project.

- Multifamily building residents –food scraps reduction and diversion
- Multifamily building residents –recycling
- Institutions and major industry– food scraps reduction and diversion
- Institutions and major industry –recycling

Other suggestions from the SLRD SWRMP update process and elsewhere (target audience to be identified for some)

- Reduction and reuse of single use packaging (plastic bags, coffee cups, water bottles)
- Reduction of unwanted ad mail through signing up residents and business for Canada Post’s program to opt out as well as for unwanted directories through Yellow Pages and Can Pages (can distribute stickers at events, can have iPads for people to register online at events).
- Encouraging reuse
- Encouraging repair through highlighting existing options and/or by hosting repair cafes
- Promoting the use of rental and sharing options (work with Chambers of Commerce to have them identify repair and rental options offered by their members, support the creation of equipment libraries)
- Reduction of material use by encouraging gifts of experience over gifts of things (using materials developed and shared by Metro Vancouver)
- Encouraging use of back yard composting through a bear aware compost coaching program
- Recognizing Zero Waste heroes with a school programs where classes receive buttons to hand out to people they see modeling desired behaviour. Heroes are asked to log in to the website to state what they received the award for and to pass it on to the next person they see doing the right thing.

A Reduce/Reuse campaign could incorporate many of the above ideas, working with the Chambers of Commerce to highlight local businesses, using iPads for online signups for opting out of yellow pages distribution, giving out stickers and instructions for people to avoid junk mail from Canada Post, showing an “urban backpack” with reusable coffee mug, cutlery, shopping bag and workshops for people to share their solutions and tips. Similar tactics that were recommended for the food scraps reduction/diversion theme such as Zero Waste heroes and their news stories could be used as well as competitions, pledges and partnerships with relevant businesses for prizes.

APPENDIX C: SOCIAL MARKETING AUDIENCE SEGMENTATION PROCESS

On a scale of 1 – 10, with the **higher end being the best possible**, score the following groups against the criteria identified. Note that your scores will be determined by their comparison to each other. One segment has been left blank for you to add your own, if desired.

S: Size: total number of people that could be influenced: estimated population

AR: At Risk: most likely to engage in problem behaviour

P: Persuadability: realistic to expect change in attitudes and behaviour of the group

A: Accessibility: ease in reaching the group through existing communications tools

RR: Resources Required: financial and other assets needed to reach the group

Segment	S	AR	P	A	RR	TOTAL
Residential, single family in town						
Residential, single family rural						
Residential, multi family complex						
Institutions and major industry like schools, hospitals, etc.						
Commercial: retail and office						
Commercial: food and Accommodation						

APPENDIX D: POTENTIAL STAKEHOLDER LIST

This list highlights the main stakeholders whom the SLRD will want to consider when designing programs. For certain projects, there may be additional ones for specific materials.

Primary Stakeholders

Primary stakeholders are those integral to the program, such as decision-makers targeted to ensure effective support or residents or businesses targeted in order to influence behaviour.

Internal – Decision Makers, Opinion Leaders and Support

- SLRD Board of Directors
- SLRD Staff and contractors

External – Decision Makers and Opinion Leaders ⁴

- Ministry of Environment – Environmental Protection Division
- Ministry of Environment regional offices (sit on Regional District Waste Committees etc.)
- BC Product Stewardship Council
- BC Stewards Association
- Local governments' Mayor and Council, administrators or managers
- Members of the Legislative Assembly
- BC Members of Parliament
- Aboriginal leaders/First Nations
- Local government waste management and education staff
- Local government contract staff (i.e. landfill contractor, hauler)
- Local government support staff that respond to inquiries
- Key ENGOs (e.g. AWARE, Squamish CAN)

External - Partners / Service Providers

- Recycling Council of British Columbia (RCBC) operating information services
- Service providers including waste haulers and recyclers such as Whistler Community Services Society, Regional Recycling, Carneys, Waste Control Services, Lillooet Recycling & Disposal, Sea to Sky Soils, etc.
- Service providers offering stewardship programs like Encorp Pacific, and Product Care
- Service providers offering rental, sharing or repair services
- Retail and commercial partners that are providing reduction/diversion theme information at point of sale/decision *(note: this may be most effective when part of a larger ICI target audience campaign, to ensure congruence between partner organizational waste management practices and public promotional of SLRD waste reduction brand).

External - Residents

Residents may be further identified based on their type of dwelling, such as single family home or multi-family home, or by rural or urban location. Residents can be defined by demographics such as age (i.e. children, youth,

⁴ Note that some of these could be internal where working groups and partnerships are formed.

adults, seniors), by family status (i.e. parents with children, empty nesters, retirees) as well as by gender. Other characteristics, known as “psychographics” may also segment the residential target audience by habits, attitudes, lifestyle, and behaviour patterns, such as gardeners or commuters. Strategies, tactics, and message delivery may vary according to target audiences. For example, backyard composting messages are well suited to the residents in single-family homes, while not as applicable to those living in apartments.

Individual audiences can include:

- Single family homes
- Multi-family homes
- Rural residents
- Urban residents
- Families with children
- Children
- Youth
- Adults
- Retirees
- Seniors
- Employees

External –Businesses, Institutions, Accommodations

This can include individual businesses or types of businesses such as retail, office, foodservices and accommodations services. It may depend on size of business or the specific community. In some cases, there are local associations to which they may belong (e.g. Whistler Retailers Association). Institutions can include schools, universities and health care and long-term care facilities. In the region, there are various types of accommodations from hotels, and bed and breakfasts to timeshare strata buildings with property managers that may require different approaches.

External –Construction, Demolition, and Renovation

Solid waste statistics often have a separate category for waste generated by this group as there are different kinds of materials handled and the logistics may be different. This would include companies that construct, demolish or renovate buildings but there may be other groups to consider that may be in this category or others (such as planners, permitting staff, rebuild it centres, architects, and certification programs).

Secondary

The following audiences have been identified as secondary in order to prioritize delivery of programs.

External – Media

Mass media is identified as one of the foundational tools in community-based social marketing. Paid advertising disseminates the SLRD’s messages to a large portion of the population over a wide geographically diverse area and supports ongoing educational activities at the local level. In some cases, Public Service Announcements could be created and aired or published.

Leveraging media coverage through publicity efforts can serve to increase this reach. Strengthening media relationships can increase social diffusion of the message as it is broadcast by credible media personalities

- Community newspapers
- Radio
- Online news outlets or discussions

External - Schools

Behaviours learned in the classroom help shape the social norms and values of a community, as students learn new behaviours and transfer them into the home. The school community is a primary focus for delivering environmental education.

- School District administration
- School Principals
- Teachers
- Students

External – Provincial / Regional ENGOS

These are like-minded organizations that are often composed of opinion leaders at a provincial or regional level. They can serve as channels for information distribution and for feedback.

- Sierra Club BC
- David Suzuki Foundation

External - Community Organizations

These are key groups of residents and are often opinion leaders at the grassroots level. In addition, they also serve as excellent channels for information distribution and feedback.

- Chambers of Commerce and other business leaders or associations
- Service clubs such as Rotary, Lions, and Kiwanis Clubs
- Community neighbourhood resident and ratepayers associations
- Interest-specific groups such as WORCA, SORCA, outdoor clubs, women in business groups, etc.

APPENDIX E: SLRD STATISTICAL INFORMATION

This data provides a description of the residents and characteristics of the SLRD. The data is from Statistics Canada 2011 Census and Composting by households in Canada (Statistics Canada).

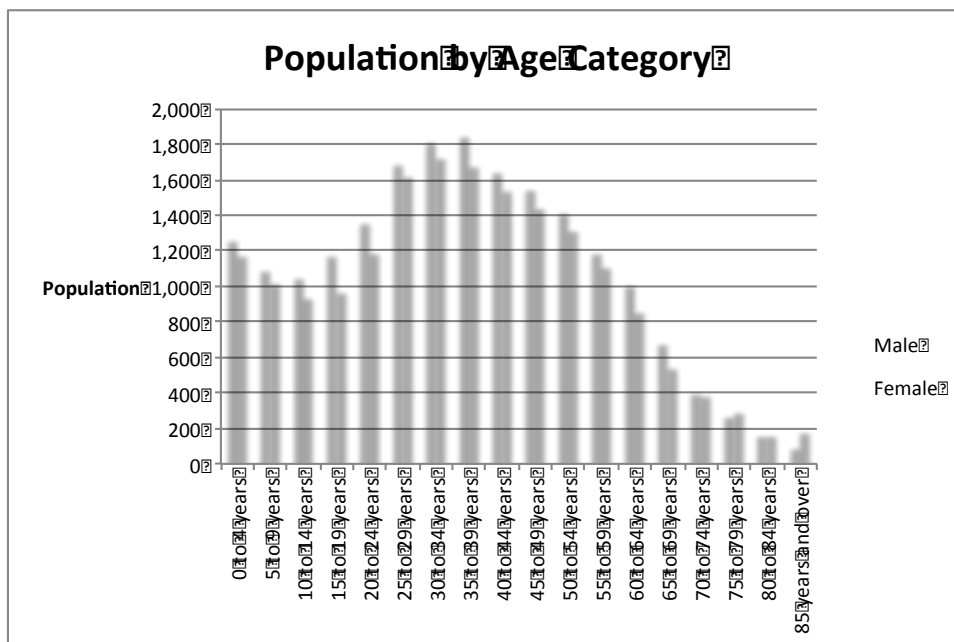
Population -38,171 (note this does not include the very high number of visitors that come to the region and use the infrastructure built for them. These visitors are concentrated in Whistler but also visit surrounding communities.)

Private dwellings -22,146

Private dwellings occupied by usual residents 14,998 (note that there are more private dwellings than are occupied as there are many second or holiday homes that are only used occasionally. The percentage of unoccupied homes is higher than in other communities due to the region’s tourism sector and needs to be considered when offering services as there can be peaks and dips in demand for services and some actions may not be suitable for non-permanent residents (such as backyard composting) or neighbourhoods with a high vacancy rate (such as curbside collection).

Population density -2.3 persons/km² with a land area of 16,310 km²

Age Groupings by Sex in the SLRD



Median age – 36.2 (note this is lower than the provincial average of 41.9 years and may reflect the numerous younger workers that come to work in the resort or enjoy the outdoor activities). There are also slightly more males in this region (52% of the population versus 49% provincially)

Marital status – 57% are married or living with a common law partner (note this is similar to the BC average but in the SLRD a higher percent of those people are common law rather than married, possibly reflecting the younger

demographic). 43% are not married or living common law which is also similar to the BC average but a higher percentage of those people in the SLRD are single and have never been married rather than separated, divorced or widowed (this again may be a reflection of the younger demographic).

Family characteristics –There are 10,260 families and 49% of them have at least one child at home which is similar to the provincial average. There are 8,190 people not living in a census family (living alone, or with others)

Table E-1 Household and dwelling characteristics

Dwelling Types	Number of Dwellings	Relative Percentage
Single detached house	6,895	46.0%
Movable dwelling	810	5.4%
Semi-detached house	870	5.8%
Row house	2,290	15.3%
Duplex	1,635	10.9%
Apartment (under 5 storeys)	2,400	16.0%
Apartment (5 storeys or more)	65	0.4%
Other single-attached house	45	0.3%
Total number of occupied dwellings	14,995	

Language -83% of residents have English as their mother tongue, 3.5% listed French and 12% listed other languages (the highest being Panjabi 3% and German 1.6%, Tagalog 1% and Japanese (1%). Only 325 people do not know English. While there are numerous languages spoken at home, there are no predominant groups and English is commonly spoken in the region.

Business information

There is a Chambers of Commerce in each of the member municipalities:

Lillooet -50 members

Pemberton -145 members

Squamish -520 members

Whistler over 800 members

Note: some businesses may belong to more than one chamber.

APPENDIX F: RECOMMENDATIONS FOR SIGNAGE AND BINS

Studies on best practices for signage and bins shows that the following is the most effective:

- Reverse signage - white letters on darker background, high contrast
- Terminology clear, short, consistent
- Clear slogan and messaging
- Consistent colour-coding - (mixed containers/recyclables – blue, paper – yellow/gold, organics –green, landfill black or grey)
- Photo realistic or pictorial images without product branding for “point of use” signage
- Large icons on front to identify bins and ideally coloured bins (plus line of sight labels above and possibly also below the slot for people approaching from different angles or of different heights)
- Use tied bag or garbage can as iconic garbage sign (indicates a mix of unsorted items)
- Use banners or floor/walls where appropriate
- Keep waste prevention in mind (do not show whole food or usable items)
- Use restricted shapes to guide behaviour
- Consistent bin order –recycling, organics, and then landfill last
- Use modular containers for maximum versatility related to material types collected and options for “right sizing” bins over time; vet for accessibility and ease of servicing bins
- Use transparent bags to ensure servicing of bins is conducted properly (e.g. clear blue for recyclables, compostable liners for organics, and clear for garbage)
- Replace higher use solo garbage cans with zero waste stations; eliminate other solo garbage cans

It has been shown that clear graphics can reduce contamination by 50%. Despite the perception that people have that they respond best to words, testing showed that the decision making process to determine which stream to place an item in was slower with words only. When words are needed to define terminology, reverse signage makes words stand out more clearly as shown in the York Region, Ontario signage below.



Compost and recycling bins are the hardest to navigate so consistent colour coding and signage is especially important. The Granville Island Zero Waste station below shows the effective use of large “approach” icons and



colour coding with pictorial/photo realistic point of use signage. It is also recommended that the SLRD work towards using the colours noted above for bins where possible as well as encouraging partners to do the same.

With the above in mind, and the start of the Multi Material BC program—which has introduced its own signage which uses the above practices—it is recommended that the MMBC icons (as adapted by Whistler to remove the pizza box from the mixed paper and cardboard icon) be used. Where there is not an icon available for specific items, using one from the resources at www.3Rs.ca which is promoting a Canada-wide use of certain images, means that over time, residents and local visitors will become more familiar with them.

It is recommended that the SLRD create its own downloadable signs and encourage municipalities, businesses and residents to use them. Below is a screen shot from the City and County of San Francisco’s sign maker page⁵, which provides image options for businesses, apartment managers and others to customize their own signs while still keeping the same look and feel.



Related Signage Studies:

Title	Source	Highlights
Best Practice for Public Space Recycling	Collaboration between the BAR Lab, Metro Vancouver & UBC. Contact Metro Vancouver Corporate Relations for more information: www.metrovancouver.org , 604.432.6200	Examined the impact of colour vs. black and white, images vs. words, icons vs. photos on time and accuracy of reaction. Found that colour, images and photos deliver the best results.
Colour, Cognition, And Recycling: How The Design Of Everyday Objects Prompt Behaviour Change	http://americarecyclesday.org/wp-content/uploads/2013/07/MontazeriGonzalez-2012.pdf	Experiment conducted in university setting to study the role of colour in triggering recycling behaviour. Found that colour can affect the salience of an object and consequently trigger the associated desired behaviour.
Clinical Validation and Cognitive Elaboration: Signs that Encourage Sustained Recycling	http://content.lib.utah.edu/cdm/ref/collection/uspace/id/5258	Tested different forms of signage and persuasive messages to increase recycling. Found that simple, well-designed signs can influence behaviour while the signs are in place as well as

⁵ City and County of San Francisco, 2014. <http://www.sfenvironment.org/signmaker>

		after their removal. Effective signs can encourage recycling despite some inconvenience, thereby potentially reducing the costs of recycling programs.
Keep America Beautiful	http://americarecyclesday.org/wp-content/uploads/2013/07/Public-Space-Recycling-Guide1.pdf	Ten tips for developing public space waste diversion opportunities, includes best practices for signage: use few key words, use clear language, pictures are best, avoid "don'ts", put label where it will be seen.
Metro Media Technologies	https://www.google.ca/#q=MMT+outdoor+101	How to use colour in designing public space and outdoor signs. Need to focus on: intensity, legibility, contrast and comprehension for best results
The Art & Science of Signs and Graphics, Article in Winning Campaigns	http://www.completecampaigns.com/article.asp?articleid=30	Tips for developing cleaner, brighter, more readable graphic signs. Rendering your name in reverse - white against a contrasting bright or dark coloured background- makes your name look larger and improves visibility. According to a study by the Outdoor Advertising Institute, reverse messages are up to 40% more visible.

Sample signage for the SLRD:

Plastic, metal or paper containers

Accepted:

- plastic containers
- aluminum or steel containers
- paper packaging for liquid items

Not accepted:

- scrap metal, cord, wire
- foil bags, foil wrap with paper, foil lined cardboard, stand up pouches
- packaging of hazardous or flammable products
- non-packaging plastic like lawn edging, furniture

*Take beverage containers to Return-It Depot for refunds



www.slrld.bc.ca/lovethisplace

Printed paper and cardboard

Accepted:
(Clean, dry and flattened)

- printed paper
- paper packaging for dry items

Not accepted:

- books
- non paper gift wrap
- anything with padding, wax coatings, foil linings or batteries
- no paper towel, napkins, tissues



www.slrld.bc.ca/lovethisplace

Food scraps

Accepted:

- fruit, vegetables, peelings, pits
- cooked food: bones, meat, fish, dairy, nuts, baked goods, pasta, sauces, cereal, coffee grounds
- flowers and houseplants
- certified compostable containers
- paper or cardboard with food stains
- wood stir sticks, napkins

Not accepted:

- rubber, plastic, metal, biodegradable, wax materials (remove stickers)
- paper egg cartons
- grease or cooking oils
- diapers



www.slrld.bc.ca/lovethisplace

Glass bottles and jars

Accepted: (Empty and rinsed; labels OK)

- clear and coloured non deposit glass bottles and jars
- recycle lids; place loose with other containers

Not accepted:

- non-packaging glass like drinking glasses, dishes, cookware, windows, ceramic products

*Take beverage containers to Return-It Depot for refunds.



www.slrld.bc.ca/lovethisplace

Plastic bags & overwrap

Accepted:
(stuff into one clear bag and tie closed)

- only bags and wrap such as that around popcans, paper towels, etc.

Not accepted:

- crinkly cellophane wrap, stretch wrap
- zipper lock bags
- multilayer bags
- biodegradable/compostable bags
- shipping envelopes or bubble wrap



Plastic foam packaging

Rinse and remove other materials

- keep colours separate
- NO packaging chips/peanuts or foam board insulation



www.slrld.bc.ca/lovethisplace

Waste to landfill

\$1 per 40 L or 9kg bag or \$120 per tonne

No cost or lower costs for recycling and food scraps

Reduce your costs by reducing your waste!

Look at your waste and check:

- What items could have been replaced by reusables?
- What items could have been reused?
- What items could have been composted?
- What items could have been recycled?

Plan for next time to save.



www.slrld.bc.ca/lovethisplace

APPENDIX G: FOCUS GROUP RESULTS

Date: July 8, 2014, at the Millennium Place in Whistler

Attendees: 4 women + 2 men, all from Whistler (representatives that were confirmed to attend from Squamish and Pemberton did not arrive). These people varied in experience with solid waste diversion and reduction practices in their daily lives, from avid enthusiasts to beginners. People were recruited through member municipality social media channels, as well promotions through personal networks.

Purpose of Focus Group:

- Understand how people think about the waste reduction issue
- Identify where people look for waste reduction information
- Understand the barriers preventing people from reducing their household waste
- Discover motivating factors that would encourage participation in household waste reduction
- Response to initial program messaging / branding options

Analysis:

When asked to describe **waste reduction habits that people wanted to improve**, the following themes emerged:

- Better system: more efficient way of sorting and storing materials; what are the best bins and where to store them at home
- Clarity about contamination issues: for compost and recycling
- Connection to transfer station/depot system: want information they can trust about the system at the transfer station/depot that can be replicated, “mirrored”, at home
- Over-packaging of materials: how can municipal governments pressure for change? Interest in EPR

When asked about **where people find information**, the following themes emerged:

- Online, but not clear about where to look. Often use Google for information (rather than local and/or regional links); Carney’s website
- Waste facility staff
- Newspapers –Pique, editorials, would like recycling tip of the week
- Peers, friends who know more than they do
- Note that in some families one partner may sort at home and the other may actually drop it off (need to communicate with both)
- One person noted that they use You Tube to find out how and why to do things
- For reuse: buy and sell, kids swaps, Facebook
- Would like to hear how we are doing when elected officials speak to reinforce that this is what we do, pride, showcase accomplishments in living sustainably

When asked about **barriers to reducing waste**, the following themes emerged:

- Two major themes: transfer station/depot staff ineffective (discussion about not having information or giving misinformation), and ineffective home systems (i.e. storage bins)
- Conflicting information online, and online info is different from brochure information = confusion
- Stratas have terrible waste diversion systems; people living in stratas have fewer reduction options
- Misinformation from transfer station/depot staff: i.e. plastic film is incinerated, there is nowhere to recycle light bulbs

- Don't want to spend time at the depot: want to be in and out, but also see transfer station/depot staff as experts who could be consulted for advice if the customer service was better
- Perception that bins already take up too much space at home
- Compost: possible perception that they are already active enough with their recycling efforts
- Myth that recyclables are dumped: what happens to all the recyclable stuff at the end? Incinerated? Is the stuff actually made into something new?
- Compost: stinky bin, aren't happy with the system of managing scraps in home
- Can there be more reuse at depots (discussion about how a person used to take door hinges, etc off of items left at depots)
- Would like curbside pick up
- Need to educate newcomers (HR departments, Spirit Pass training, staff housing, etc) "we love this place and this is what we do with our waste..."

When asked about **motivating factors to improve waste reduction**, the following themes emerged:

- Two major themes: proof of impact/outcome, and feelings of making the world/community better
- Face to face conversations with experts who are teaching about new systems; explain what happens to the recycling; why is it worth the effort
- If facility staff were better service providers: misinformed, did not follow up to get question answered; rude to people; do not appear knowledgeable. Need more pride in the job. One said friendly interaction where items were taken away for refurbishing
- Simple poster with information about what can be done locally; stickers for home bins that mirror the transfer station/depot system
- There should be a sign at the garbage bin that tells people to stop and check, "Dude! There's a glass recycling bin over there! Are you sure you need to drop that off here?" and thank you notes on the recycling containers
- Walk to garbage bin/chute should be walk of shame.
- If the bins separate the types of recycling, then they believe that the stuff ends up be recycled but if its' one big bin then they're more sceptical
- More disincentives they felt could work: fees for putting recyclables/food scraps in garbage
- Share detailed target: not a broad "waste reduction" target, but more specific diversion theme goals
- Localized impact of waste: consequences to water quality; consequences to climate change
- Feel more connected to the community and better about themselves when they know they're doing the right thing; doing the right thing is empowering
- Guilt feeling by doing the wrong thing, that I'm damaging the environment but I brag to everyone about where I live I feel ashamed of myself
- Negative stories from other places in the world: See how bad it can be in other places in the world; it is pristine and heaven here, want to do the right thing in every aspect of life for here and for the globe; pacific gyre of plastic.
- Discussion of how in Japan the garbage men check your waste and will return it if unsuitable
- Seeing recycled fleece proves that there is a positive outcome of recycling: show the lifecycle of recyclables to demonstrate what happens to it; show how SLRD and local municipalities use recycled products that could have come from our own collection systems
- Have same systems (i.e. recycling and bin categories) throughout: depots/transfer stations, home bins, workplace bins, streetscape bins

When asked about how to **pass along their engagement**, the following themes emerged:

- Talking with people at work is the best way to spread the message
- The workplace is like having roommates that bring these new habits home with them, different group of people interacting

- Make it a standard way of life in public places; make public places the role models of waste diversion; the single recycling bins in public spaces send the message that it is all contaminated
- Need to showcase rebuild it and reuse it centres; need to show the EPR options

Key messaging recommendations:

- Icons –initially not sure of connection of paw to waste but as they started discussing it, made the connection and then liked it. Especially once added taglines. Discussion of local versus global issue. Selected bear icon with green and tan icons of options shown. In black version, concern that claws look like candles.
- Preferred version with tag line separate and horizontal below icon as opposed to including in icon.
- **Love this place, reduce your waste** (this was a modification of one tagline suggested by a group member, which the whole group then chose as their favourite)
- Zero Waste not seen as compelling: seen as too lofty, too ambitious and unattainable, confusing, not motivational as felt it is too far away
- Front line transfer station/depot staff have untapped role
- Lack of dialogue on the waste issue; need more, get it started in local papers
- Award or publicity for people who are reducing waste: want to see success stories, need to hear stories of how people are solving the problems they have, what are they doing to overcome barriers
- Local business success stories: they are motivating
- Monthly award: nominate each other for specific examples of what’ they’re doing, personal connection goes a long way, “waste reducer of the week”
- Provide free compost bins for use inside (i.e. kitchen catchers)
- Need benchmark: where is the best I can be, where should I be when compared to others
- Include metrics and a scale (e.g. this many bottles end to end of x kg of paper recycled equals _____)

APPENDIX H: ACTION PLAN

The following tables provide the detailed actions to be taken, the materials required, times and resources, as well as space to identify the person responsible for the action (in-house or with partners). Once the action and the person responsible have been confirmed more accurate costs can be determined. Cost estimates have been provided for planning purposes. Note that developing partnerships and collaborating with other agencies may be a way to accelerate the rollout of this plan or extend its reach; however, time must be allocated to developing these partnerships and the number of partners and their availability will impact the amount of time required to complete tasks. Timelines can be adjusted based on work with partners. To coordinate these actions with other existing communications actions, it is recommended that an annual planning calendar is used to plan events, programs and services for the year. The six phases of a social marketing plan are outlined in Section 4. Note that these tables outline key tasks but is not a comprehensive list of every action that will be required and through work with partners, other actions may need to be added. There are some time estimates included here but these are strictly estimates. There may be more time needed for actions with partners and there may be additional time needed for other details not listed here (such as setting up office computers, liaising with printers, team meetings, etc).

Phase 1: Develop the Social Marketing Plan

Time frame (June 2014 -October 2014)

Phase 1 has been mostly completed for the overall solid waste communications coordination improvements, as well as the first program theme: organics or “food scraps” reduction and diversion. The remaining tasks shown below are to pilot the food scraps collection tools in one or two partner municipalities before rolling out the program more broadly across the SLRD and in the future, use the six stages outlined in section 4 to plan the next reduction/diversion theme.

Table H-1 Phase 1 Actions

	Phase 1 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Pilot Pumpkin Drop project of initial food scraps actions and revise plan as needed.	Advertisement, Facebook post, web information, arrange and staff events, collect data and feedback	Fall –prep, Early November - implement	30 h	Number of attendees, weight of food scraps/pumpkins, website hits, feedback
2	Review new SLRD food scraps promotional plan and revise plan as needed based on pilot project	None yet: preparation stage. New materials are already prepared and will be printed and distributed in Phase 2 below	Fall 2014	10 h	

3	Develop plan for next reduction/diversion theme (once first one has reached maintenance phase)	None	2016 or as suitable based on results	Variable	
---	--	------	--------------------------------------	----------	--

Phase 2: Develop Tools

Time frame (September 2014 - April 2015 – ongoing)

This phase involves developing tools that will be needed to implement a program. Initially it will also include the development of standard tools that can be used for all SLRD programs and which partners should use where possible. This includes a website, standards for signage, standards for bin colours and labels, a brand and logo and standard messaging. In some cases, these tools may also include ones that are not directly communications-related but address a program-related barrier noted by the target audience (for example, the need to change hours of operation or provide kitchen catchers).

Objectives met:

- Knowledge: Waste reduction and diversion options and services in their community
- Belief: It is easy to find out what they need to know
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: All internal and external decision makers and opinion leaders are made aware of the new tools. Wherever possible, they are encouraged to provide links to SLRD website for solid waste reduction and diversion information.

Outcome: Internal and external decision makers are prepared for the solid waste information requests.

Outcome: Member municipalities, service providers and ENGOs website link to the SLRD Solid Waste webpages.

Outcome: SLRD and associated partners use branded, standard messaging for solid waste.

Table H-2 Phase 2 Actions

	Phase 2 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Set up and coordinate SLRD solid waste communications partnership group with member municipalities, First Nations,	Meetings	Sept 2014 and	Depends on partners	Progress on partnership: #

	key service providers and others. Meet at least quarterly. Consider using video and screen sharing call in capacity for more distant team members.		quarterly thereafter		meetings, # partners
2	Develop SLRD webpages for solid waste that reflect the needs outlined in the plan Use search engine optimization strategies so that SLRD waste landing webpage is one of top three hits on Google for common phrases	Website	Sept 2014 and ongoing	5 h	Complete ⁶ Ranking on Google search
3	Develop QR code and include on printed collateral.	QR code	Sept 2014	1 h	Complete
4	Ensure accurate information is provided by partners (check RCBC website recycling information as well as inform any other partners of discrepancies).	None	Sept 2014	15 h	Accurate info # of reports of inaccuracy
5	SLRD to use the icon for all public solid waste information pieces	Include on website, email tags, printed materials for public, advertisements, collateral	Fall 2014	2 h	Complete Regular check
6	SLRD to encourage the use of the icon by member municipalities and other partners (AWARE, Squamish CAN, etc)	Meetings, communications with partners	Fall 2014	2 h	How often used? On municipal waste webpages
7	Develop outreach kit for use in Farmers Market Zero Waste stations	Outreach kit (includes wallet cards, pledge cards, other items as relevant)	Fall 2014	3 h	Complete
8	Develop a list of opportunities to give brief presentations to new residents and plan for the following year	List	Fall 2014	Depends on opportunities	Complete and vet with partnership group
9	Banner for events with icon and tagline and SLRD logo	Durable banner	Fall 2014	3 h	Complete
10	<u>Signage for bins and colour guidelines</u>	Jpegs (other formats as needed) of signage	Fall 2014	Depends on work with partners	Complete

⁶ Completing a task will also include vetting and/or reporting back to the partnership group and maintaining an updated task list.

	<ul style="list-style-type: none"> • Approve standard signage with partners (munis, service providers, MMBC) • Make signage available on website for downloads and printing (by citizens for home bin labeling and businesses for their internal bins); print stickers for citizens for distribution at waste facilities and events • Present information on plan and new signage to chambers of commerce 4), school districts (2) and healthcare organizations (2)⁷ • Encourage use of signage in multifamily buildings (engage with service providers, management companies, stratas in conjunction with host municipality) • Develop plan for having these signs used for all waste facilities in SLRD • Develop plan for having these signs installed on all streetscape bins in the SLRD 	<p>Guideline document, stickers, online signage</p> <p>Presentation</p> <p>Presentation</p> <p>Plan, signs for SLRD sites</p> <p>Plan</p>	<p>Winter 2015</p> <p>Winter 2015</p> <p>Winter 2015</p> <p>Fall 2014</p> <p>Fall 2014</p>		<p>Number of downloads</p> <p># meetings</p> <p>1 meeting per municipality</p> <p>Complete</p> <p>Complete</p>
11	<p><u>Waste facilities</u></p> <p>Develop plan for maximizing waste reduction through waste facility site layout (i.e. place garbage bins in less convenient locations at transfer stations, and put signs on garbage bins, such as “last stop before landfill” and questions, such as “Have you really done everything you can to love this place and reduce your waste?”, provide additional info at garbage bin (i.e. if not Styrofoam in this bin, clear transfer station map about which bin).</p> <p>Provide training for waste attendants to be able to answer common questions and ensure clarity on answers</p> <p>Investigate best way for waste attendants to follow up with residents questions they could not answer (i.e. smart phone, getting email addresses, café style blackboard)</p>	<p>Plan, meetings</p> <p>Q&A</p> <p>Plan</p>	<p>Winter 2015</p> <p>Fall 2014 /Winter 2015</p> <p>Fall 2014 /Winter 2015</p>	<p>Depends on partners and # of training sessions required</p>	<p># facilities laid out this way</p> <p># training sessions</p> <p>Secret shopper experience</p> <p>Complete</p>

⁷ This also lays the groundwork for future collaboration when the ICI audience is engaged. Include the ZW school coordinator in the school district meetings.

12	Develop base line metrics for waste weights by month, food scrap weights by month and waste site visits by residents (can be a one week record)	Metrics	Fall 2014	10 h	Complete measurements
13	Develop wallet card for each municipality and arrange for printing on 100% post-consumer recycling paper using vegetable-based inks (or lead and acid-free)	Wallet cards	Fall 2014	4 h per card	Complete
14	Develop different contact lists for different key stakeholders that need to be engaged or kept informed (municipal waste staff, municipal front desk staff, SLRD Board, municipal councils, waste attendants, service providers, local media, grocery stores, etc.)	Contact lists	Fall 2014	10 h set up plus ongoing	Complete
15	Develop outline for Zero Waste coaching sessions as community talks. Start with food scraps and move from there. Participants share ideas and stories with SLRD or partner person as facilitator. Facilitator can be the Zero Waste educator if time permits.	ZW coaching outline for workshops	Fall 2014	3 h	Complete
16	Continue with existing tools: Support of RCBC Hotline and Recyclepedia; contract with Zero Waste educator; existing partnerships. Zero Waste educator to integrate diversion theme into workshops.	None	Ongoing	Existing Depends on theme and existing curriculum	Complete annually

Food scraps-specific

While the actions in Table H-2 are to build tools and systems that will work for all diversion themes, the table below shows the actions that are specific to the food-scrap diversion theme.

Table H-3 Phase 2 Food Scraps-Specific Actions

Phase 2 Tactic –Food Scraps		Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Provide hoses and drains for home kitchen container rinsing near the food scraps collection bins at waste facilities	Hoses, signage	Fall 2014 – Spring 2015	Depends on existing infrastructure	# food scraps facilities with hoses
2	Develop and print pledge cards for residents to commit to reducing and diverting food scraps in the waste at events or waste facilities	Pledge cards	Fall 2014	3 h	Complete
3	Develop list of what food scraps drop spots are available for each community or note if none List what can go in and what can't	List of drop off opportunities Webpage and wallets cards	Fall 2014 Fall 2014	2 h	Complete
4	Develop advertisement for single family building residents	Food scraps advertisement	Fall 2014	1 h	Complete
5	Conduct and document an initial meeting with grocery store managers to encourage them to partner with the food waste prevention program (especially on area of shopping lists, planning, recipes). Follow up tool development could be store handouts they produce using SLRD artwork and messages plus an information session as held in Nesters Whistler)	Meeting to explore	Fall 2014	Depends on partners	Progress?
6	Develop list and timeline for key events that will have food scraps-related outreach	List	Fall 2014	5 h	Complete

7	Develop job description and hiring plan for keen food scraps ambassadors for events and facilities Hire ambassadors	Events requirements; HR support	Fall 2014	20 h	Complete
8	Get kitchen catcher bins for distribution (recycled ones from businesses like Cows as well as ordering some) Determine if can get small bags of soil amendment to give out with bins to demonstrate the full cycle and result of composting.	Bins Soil Amendment	Fall 2014 Fall 2014	7 h	Complete
9	Work with partners to get donations of small prizes (i.e. useful and/or durable 'green swag' that can be easily composted or recycled [pencils, kid-friendly temporary tattoos, hats, Frisbees] or gift certificates or food)		Winter 2015	5 h	Complete
10	Develop webpage content on where to get kitchen catchers and features to look for (local businesses, various models, features and where to get) Develop webpage content for food scraps program based on hierarchy (i.e. source reduction, food recovery – people and then animals, industrial uses and composting)	Webpages	Fall 2014	10 h	Complete
11	<u>Service providers (waste and composting) and waste attendants</u> –discuss the plan with them. Ask them to take baseline measures of key statistics.		Fall 2014	4 h	Complete Measures taken

Phase 3: Program Notification

Time Frame (March 2014)

Objectives met:

- Knowledge: How to improve their participation in waste reduction and diversion
- Belief: Inspired to help achieve the community waste reduction and diversion goals
- Behaviour: Motivate and inspire others to improve their waste reduction and diversion efforts

Purpose: All internal and external decision makers and opinion leaders are notified of the program’s progress and launch date by (SLRD to insert date).

Outcome: Internal and external decision makers and opinion leaders are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with internal and external decision makers and opinion leaders.

Purpose: All external program partners are notified of the program’s development progress to date and launch date by (SLRD to insert date).

Outcome: Service delivery is coordinated between existing service providers and the SLRD.

Outcome: Program partners / service providers are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with external program partners / service providers.

Table H-4 Phase 3 Actions

Phase 3 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1 Identify media spokesperson/s and provide training as required	Training session if needed	Winter 2015	4 h	Prepared?
Provide Q&A for all partners including date of program launch or event dates for multiple stages. Check messaging with partners	Q&A	Winter 2015	10 h	Complete
Identify target communities for different messages (i.e. food scraps reduction and backyard composting for areas with out food scraps drop spots). Work with member municipalities and First Nations to develop area specific messages.	List	Fall 2014	Depends on partners	Complete
Prepare website landing page for food scraps reduction and diversion	Webpage	Fall 2014	3 h	Complete
Ask partners to list key program information on their websites and to link to the SLRD webpage for more information	Sample language and layout for partner’s sites references	Fall 2014	2 h	# links # blurbs

2	<u>SLRD Board, municipal councils, CAOs</u> Provide email and or mail notification of program development, launch in (SLRD to determine date) and promotion in summer and fall Provide Q&A	Email, Q&A document	Winter 2015	6 h	Complete
3	<u>Key SLRD staff, key municipal staff - waste reduction management staff, educators/communicators, public works staff, relevant ENGOS</u> Provide email and or mail notification of program development, launch in (SLRD to determine date) and promotion in summer and fall Provide Q&A Commit to ongoing dialogue about program launch	Email, Q&A document	Winter 2015	10h	Complete
4	<u>Service providers (waste and composting) and waste attendants</u> Provide personalized email and or mail notification of program development, launch in (SLRD to determine date) and promotion in summer and fall Provide Q&A Commit to ongoing dialogue about program launch	Email, Q&A document	Winter 2015; follow up as needed to accommodate staff turnover	10 h	Complete
5	Work with RCBC to make sure they have correct information for communities and are aware of new initiative Ask RCBC to provide tracking on calls regarding food scraps (as well as other questions) as baseline and with monthly or quarterly updates	Q &A document	Fall 2014	5 h	Complete
6	Develop Public Service Announcements for printed media	PSAs	Winter 2015	5 h	Complete
7	Media (earned): Draft a coming soon press release and backgrounder about new program using Q&A for public as a basis	News release with Q&A for public	Winter 2015	10 h	Complete
8	Train ambassadors on information they need to know (facts, program intention, customer service and engagement, etc) Also train transfer station attendants, as necessary	Training outline, training days	Winter 2015	15 h	Complete

Phase 4: Program Announcement

Time frame April 2015

The program is launched during this phase.

Objectives met:

- Knowledge: Personalized benefits of reducing household waste
- Belief: Their actions make a difference
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: Notify all stakeholders of program commencement including messages about how to reduce food scraps, how to “find food scraps depot near you”, what to include, smart storage, and transport. (The purpose will be tailored to the specific program.)

Outcome: Stakeholders are aware of program commencement and know where to find information about the program.

Purpose: Prepare internal audiences and external program partners for public information requests prior to program announcement.

Outcome: Program partners provide consistent and correct information to potential program users.

Table H-5 Phase 4 Actions

	Phase 4 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Briefing note to SLRD Board and key staff and partners to provide info on program to date and plan for this phase Update action plan	Briefing note	April 2015	15 h	Complete
2	Provide update on planned promotions to service providers and waste attendants	Email	April 2015	2 h	Complete

3	Provide update on planned promotions to municipal waste reduction management, staff, educators/communicators, public works staff, relevant ENGOS	None	April 2015	4 h	Complete
4	Distribute news release to local media contacts Organize media events and photo opportunities across region to launch program and garner earned media coverage Follow up on news release (in-house) to garner increased earned media coverage (pitching for interviews)	News release	April 2015	Varies with uptake	Track uptake of news release
5	Work with local media to print PSA	PSA	April 2015	3 h	Number of printings
6	Put information on SLRD Facebook page and blog Ask for people to “like” this page Follow and like fans	Facebook posts	April 2015	10 h	Number of likes

Phase 5: Program Promotion

Objectives met:

- Knowledge: Personalized benefits of reducing household waste; Social, environmental and ecological impacts of inappropriate resource management
- Belief: Their actions make a difference
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: Increase public participation in the priority waste diversion or reduction project.

Outcome: Target audience actively uses the SLRD waste diversion services available or adopts the desired behaviour.

Outcome: SLRD waste volumes decrease.

Table H-6 Phase 5 Actions

Phase 5 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation	
1	Develop Zero Waste educator school curriculum based on food scraps diversion theme (could include action projects for classroom teachers involving groups auditing their school or a business, making recommendations and checking back in to measure progress)	To be determined, build off existing provincial and other curricula	Fall, winter-spring, summer	Depends on curriculum	# workshops, feedback
2	Host Zero Waste coaching sessions as community talks. Can start with food scraps and move from there. Participants share ideas and stories with SLRD or partner person as facilitator	Outline for coaching session, book space, advertise, etc.	Summer, Fall 2015	3 h per session (not including travel time)	# hosted, feedback
3	Partner with children's program such as AWARE kids nature club or the Whistler Museum summer programs to develop a food scraps or waste reduction themed session. It can include group activity of painting the paw prints to designated recycling or food scraps bins.	To be determined	Depends on partner	Depends on partners	To be determined
4	Give brief presentations to new residents on how we love this place so this is what we do for waste reduction (Spirit Pass training Whistler, Welcome Wagon type programs, Human Relations events for larger organizations)	Municipal wallet card	Fall/winter 2015-16	Depends on partners	# presentations, feedback, # cards given out
5	Post food theme-related items on SLRD Facebook page	Facebook	Spring-Winter 2016	4 h	# likes # posts
6	Post food theme-related items on SLRD twitter feed	Twitter	Spring-Winter 2016	2 h	Followers, retweets?
7	Good behaviour recognition –hero nomination or sending photos of people doing the right thing –Need name/pic/number or email and reason. Get people to commit to pass it on. Newspaper stories about the heroes Random awards of gift certificates from waste attendants/ambassadors to people demonstrating good food scraps sorting and collection during high traffic times (to maximize reinforcement of norms and visibility)	SLRD Facebook page, community volunteers to find heroes Newspaper stories Awards	May onward	40 h	# heroes, # website clicks # stories # awards, feedback

	Get pledges, give out bins	Pledge cards, bins, soil amendment			# pledges signed, # bins
8	SLRD SW Communications person to attend events, gather pledges and give out bins	Pledge cards, bins, soil amendment	April 2015 onwards	Depends on # events and duration	# events
9	Ongoing updates to all previously notified stakeholders on progress of program		Ongoing	Average 1 h /wk	
10	Clean Bin project –Just Eat It food waste movie screenings	Film night	If time permits		# attendees, feedback
11	Short film challenge on theme of food scraps reduction/diversion (like events during Ski and Snowboard festival), work with partner to promote, offer prizes	Film event	If time permits		# attendees, feedback

Phase 6: Evaluation and Ongoing Communication

Objectives met:

- Knowledge: Community waste reduction targets and progress towards them
- Belief: Convinced that other people “just like them” are already reducing waste
- Behaviour: Motivate and inspire others to improve their waste reduction and diversion efforts

Purpose: This phase focuses on measuring the effectiveness of the program and the development of ways to improve it as well as strategies for ongoing communication and evaluation.

Outcome: Meet SLRD waste diversion goal determined by the SLRD SWMP process or a sub-goal developed in the program development process.

Outcome: Identify if there is a need to modify or enhance the program based on results and make the needed changes.

Table H-7 Phase 6 Actions

Evaluate and act
Track key measures such as: <ul style="list-style-type: none"> • Total waste weight per site or event (per household or attendee) • Food waste remaining in the waste stream (visual waste audits) • Total food scraps volume per participating site • Webpage hits • Number of wallet cards distributed • Number of event attendees reached (over 5 years of age) • Quantity and quality of feedback • Number of pledges signed • Number of people attending ZW coaching sessions • Number of Zero Waste ambassadors trained and retained • Other material tonnages and metrics tracked by municipalities or partners
Evaluate progress quarterly and report at partner meeting
Determine what the quarterly feedback to the public will be (gather input from waste attendants and member municipalities)
Provide quarterly feedback on progress (annually on waste weights/volumes, per capita, progress to overall goal, results of past actions, upcoming actions; other quarters on a message to be determined by partners -degree of contamination, number of facility users bringing food scraps, weight of food scraps, areas of improvement, areas that need improvement, etc.)
Monitor media for relevant stories in local media and uptake of SLRD releases
Monitor website visits (SLRD and member municipalities and partners (ENGOS, service providers))
Track calls to SLRD, member municipalities and partners regarding program
Ask for ongoing tracking updates quarterly from RCBC (hotline and online)
Seek and track anecdotal information on response to program
Review responses and metrics and incorporate changes to program based on results

Continuous Improvement

A review of the implemented communication strategies and tactics can provide valuable insights for continuous improvement. This can include a review by SLRD staff, interviews with key partners and contacts, informal conversations with members of the public, reviewing any measurable data such as website hits

and those noted above. Future communication action planning should specify continuation of existing promotions and propose adding new ones to keep awareness of the program(s), and the SLRD and its partners elevated.

For tracking, a master list should be set up to track metrics from all sources (e.g. Facebook number of impressions) or events (e.g. number of events where materials distributed). This can be used to track the numbers as well as the outcomes of the event and notes about whether it was worthwhile. This information can be used to help guide future decisions. It will also be handy to have available for reporting out about the program.

Continue to build media profile

Becoming a known and trusted source for information takes time. Consider developing an annual calendar of promotional days, weeks and months and arrange to send a news release with a photo to leverage media coverage (e.g. send news release reminder and photo about all how easy to find the food scraps collection sites nearest you just prior to Earth Day or other key times during the year). Showcasing positive testimonials in mass media is an excellent way to increase earned media coverage and build community norms. Providing advance notice of media releases to key contacts such as RCBC and local government staff will be required to ensure they are prepared in case they receive calls from the media or the public.

Schools Program

There are a number of options to consider in order to build stronger ties with the schools. School age children are strong influencers for bringing new environmental behaviours into the home. Examples of school-based programs can range from formal curriculum-based programs to lighter contests and events. In addition to the Zero Waste educator using the diversion theme as a basis for the curriculum, attention should be paid to barriers for teachers and children implementing the actions in school (i.e. they may need compost collection). Addressing some of these barriers may be part of a future diversion theme. The current program allows for 20 workshops per year but increasing this to 30 would allow for some follow up and possibly the ability to reach some community groups, as was the original intention.

Community Outreach

Personal contact is one of the most effective communication channels. Building some form of face-to-face communication into diversion theme plans can support other ongoing programs and partnerships. It can also help increase the community profile of the SLRD and its partners.

Building Relationships

It is important, and a worthwhile investment, to continue on the work started in this plan to build relationships. Activities can range from simple follow up phone calls with key partners and stakeholders to more personal contact with partners through regular meetings with member municipalities to continue to elevate SLRD communication programs and also support localized outreach efforts. Other opportunities may include:

- Continue to develop and update contact lists for local governments and other key stakeholders
- Continue to work with local environmental groups such as AWARE and Squamish CAN (ZW team).

*Note: there are other methods to evaluate the impact of programs such as surveys and media monitoring, however, given the scope of the budget and the manageable scale of local media, they were not included at this time

APPENDIX I: RECOMMENDATIONS FOR SWRMP CONSULTATIONS

As part of the update of the SWRMP, the SLRD has the opportunity to both collect input from the public about what motivates them to reduce waste, and to also hear what they perceive to be barriers preventing their use of the various waste diversion options available to them. Building on the insights shared during the research phase of this communications strategy, it will be most effective to leverage the unique sense of place, and to frame the invitation for consultation as an opportunity to demonstrate how much people love where they live. Consistent use of the new messaging will help it to grow and become more relevant.

Community engagement is best viewed as a long-term strategy with the aim of fostering meaningful community leadership. While there may be short-term programmatic feedback requirements, opening an issue to public input is also about building relationships with concerned citizens. Often people attend consultations as much to gather information about an issue as to share their opinions. Promotional activities should note the benefits for people who attend, such as providing them with practical waste reduction tools and access to expert staff who can answer questions relating to home or business waste reduction.

There are a wide variety of communications channels available to collect public input. The communities within the SLRD are spread across a wide geographic range, and residents vary in their ability to either travel or access online resources. Using a combination of online and offline methods, the SLRD can be most effective in collecting input from a broad cross-section of constituents. Below is an outline of a few options that may be most effective in the SLRD member municipalities:

- Intercept surveys at transfer stations and community centers
- Online surveys available through the waste reduction section of the SLRD website
- Open House event that coincides with a local celebration or festivals
- Special feature of an ongoing community event, such as a farmer's market

Leveraging stakeholder support and partnerships is critical to success, including the use of creative promotional tactics. In addition to traditional media advertising, earned media stories about a local project or issue can help to build interest and increase participation. Inviting community leaders to become active in recruitment of public input reinforces their value to the process (critical to long term community engagement success), and extends the credibility of the SLRD. Multiple messengers using diverse communications channels with the same messaging creates a sense of momentum; this is essential to fostering a new social norm.

Developing and implementing an effective community engagement strategy is equal in importance to developing and implementing an effective communications strategy. The ten step process below, *Planning for Successful Citizen Engagement in 10 Easy Steps*, illustrates how to get started.

Planning for Successful Citizen Engagement in **10** Easy Steps

TOPIC:

- 1 What is your purpose or call to action – what are you seeking input on or problem you need to solve?** E.g. Get feedback on new bylaw? How to improve communications? Close landfill?
- 2 Who is your audience?** Who do you need to reach, who will be impacted. E.g., front line staff, elected officials, neighbourhood residents, dog owners?
- 3 What level of consultation do you want to achieve?** Inform only? Consult? Involve? Pick one per audience.
- 4 What are your key messages?** Be audience focused: What does this mean to them?

©Jan Enns Communications | OFFICE: 250.769.3627 | CELL: 250.808.3667 | EMAIL: jan@janenns.com
WEB: janenns.com |  FACEBOOK: jan enns communications

Jan enns 
communications
CONSULTING • TRAINING

5 How will you consult your audiences, what methods will you use? Set up an advisory committee? Hold an open house? Host an online forum?

6 How will you collect feedback, gain input? Conduct a survey? Online or at event?

7 How will you promote, what communication tools will you use? Send a news release, newsletter? Advertise? Put up posters? Email? Online?

8 What's your timeframe for completing these steps? What's your last day for feedback? When do decisions need to be made? When will you report out?

9 Create an action plan. Identify who needs to do what by when and with what resources (people and money).

10 How did it go? Were you successful?

APPENDIX J: REGIONAL EVENTS –LIST, SELECTION AND TOOLKIT

Events Listing across SLRD Member Municipalities

Spring/Summer

- Squamish Fest
- Pemberton Music Festival
- Whistler Presents summer series
- Whistler Children’s Festival
- Whistler Envirofest
- Summer Farmer’s Markets (across SLRD)
- Earth Day community events (across SLRD)
- Re-use it Fair (Squamish)
- Apricot Festival (Lillooet)
- Salmon in the Canyon (Lillooet)
- Moving Mountains Community Garage Sale -May (Whistler)
- Slow Food Cycle (Pemberton)
- Nesters Day (Whistler) –useful if partner with Nesters Grocery Store

Fall/Winter

- Whistler Ski and Snowboard Festival (Whistler)
- Cornucopia (Whistler)
- Fungus Among Us festivals (Whistler)
- Moving Mountains Community Garage Sale -October (Whistler)

Note that these events are for the member municipalities. Partnering First Nations could share details on events in their communities.

Criteria for Selecting Event

Not all events will yield the benefits noted in Section 6.1. To ensure a positive return on the investment of time and resources required, consider the following criteria:

- Alignment with target audience: are the people we want to influence likely to attend?
- Alignment with current SLRD priorities: does this event advance our goals, such as: relationship building with a member municipality or other partner, or connection to new target audience?
- Expected size of event: how many people are we likely to meet?
- Message permeability: can we “stand out” from the rest of the event? Will we get noticed? Are we adding value or can our objectives be achieved by others already attending?
- Behaviour change modelling: can we provide opportunity to publically demonstrate desired behaviour change? Can the behaviour be replicated by others to demonstrate new norm?
- Resources required to attend: how much time and money will be required to participate? Will the return on the investment be worthwhile?

If any of these success criteria are not possible at the potential event, there may be a good reason to pass on the opportunity. Face to face marketing can be very beneficial so it may be useful to identify 10 major special community events per year across the region, in addition to the smaller farmer's markets.

Community Event Toolkit

- Establish clear objectives: what is the purpose of attending? Set a target for the number of people you want to talk with, and what you want them to do at the end.
For example:
 - *At the end of the event, 500 people will be introduced to the new SLRD waste diversion coding system
 - *At the end of the event, 100 people will have signed a pledge to commit to using new food scraps containers and participating in one follow up with SLRD staff
 - *At the end of the event, 60 people will have signed up to opt out of junk mail and directory delivery
- Develop interactive components: flat promotional booths are rarely memorable, and even less likely to influence behaviour. People need a way to actively engage with the message.
For example:
 - *Create a speed recycling contest between two people for prizes (prizes must align with overall waste reduction message, such a kitchen catcher compost bin, a \$5 gift certificate to local re-use it centre, an SLRD branded re-usable water bottle or a cloth shopping bag made from fabric scraps or old banners)
 - *Host a mock "food scraps feud" to dispel myths about composting, and again provide prizes that get people talking
- Provide a single set of branded materials: include mix of print materials and interactive display materials, all connected back to the objectives.
For example:
 - *Print branded banner for booth display (and tent if needed)
 - *Distribute updated municipality-specific wallet cards, and provide stickers for bins that correlate to the transfer station colour codes
 - *Show different food scraps containers, with sample of scraps with paper lining (and distribute bins at certain events)
 - *Develop poster-size food scraps pledge for demonstration and postcard size pledges for use
 - *Purchase simple camera to take pictures of booth visitors with poster pledge, for posting on social media sites. If this device has web capability (like an iPad), it can also be used for future actions such as having people sign up to stop receiving junk mail or directories, as well as be used to find out information if a question cannot be answered. (Note this item is not included in the budget).

APPENDIX K: MEDIA STORY STARTERS

These ideas can be used for regular or periodic submissions to local newspapers and other forms of media.

- Rate our region against another somewhere else in the world: how do we measure up? Against two other mountain towns, one in Japan, one in France / Switzerland or Banff/Jasper
- Focus on the lifecycle of a material: what happens to all the plastic that leaves the transfer station? Where does it go, and how does it end up in the market again? “50 reasons to love fleece”
- Case study on how one busy local woman started collecting food scraps after many attempts at “quitting garbage” failed in the past. Top tips on “how to stay on the waste wagon”
- EPR programs: what it means for locals
- Relationship between landfills and climate change
- Holiday story of “giving experiences” and top local “waste free gifts to give”

APPENDIX L: ICON



Love this place. Reduce your waste.

APPENDIX M: SAMPLE PLEDGE CARD

This pledge card could be made in a postcard style using the SLRD branding and commitments could be made at events. The cards should be made public to show that reducing food scraps to waste is the new social norm. The actions below can work for most communities with the exception of the food scraps collection which is available in Pemberton, Squamish and Whistler. Note that the draft below will need to be developed in alignment with the new branding before production and should include a place for the person to sign their name or even add their photo as well as providing contact information including an email address.

Pledge Card

I commit to reducing my food scraps by:

- _____ planning my meals in advance
- _____ eating the food that needs to be used first
- _____ trying new recipes to use up leftovers
- _____ using a shopping list
- _____ eating what I buy (and saving money)
- _____ freezing extra food for later
- _____ checking if someone else wants my food (food banks or food sharing organizations)
- _____ bear smart composting in my back yard
- _____ collecting food scraps and taking them to a transfert station/drop spot

www.slrd.bc.ca/lovethisplace

 Squamish-Lillooet
REGIONAL DISTRICT

 Love this place.
Reduce your waste.

APPENDIX B:

Facility Authorization Process



Process for Authorizing New Facilities

All facilities not currently authorized in the Solid Waste Management Plan that are involved, or propose to be involved, in the handling of Municipal Solid Waste or recyclable materials, be it processing or disposal, shall file an application for authorization in the Plan with the Regional District. In the Squamish Lillooet Regional District (SLRD) this includes the following:

- a) a disposal facility;
- b) a transfer station;
- c) a material recovery facility;
- d) a storage facility (including recycling and organic waste depots);
- e) a brokering facility;
- f) a composting facility;
- g) a land clearing/ demolition waste facility (including burn sites);
- i) waste-to-energy facility (including the manufacturing facilities of refuse-derived fuel)
- j) any proposal for the beneficial use of waste;
- k) any other facility the Ministry of Environment requires.

The Director of Waste Management of the Ministry of Environment shall determine if a given or proposed facility or process can be authorized to the Plan using the procedure outlined below, or a SWM Plan Amendment is required.

Pre-Application Meeting

Prior to investing significant time and effort in the compilation of a formal application, it is required that the applicant discuss plans with BC Environment and meet with SLRD staff to identify any immediate concerns.

Form of Application

An application shall be filed at the Regional District office in the form prescribed by the SLRD and copied to both the host municipality, if applicable, and the Director of Waste Management of the Ministry of Environment. Applications submitted to the Regional District will not be accepted unless accompanied by the application fee. The Regional District will prepare a letter to the Director of Waste Management of the Ministry of Environment to determine if the proposed facility or process can be added to the Plan using this procedure found or a SWM Plan Amendment is required.

Application Fee

Every person who files an application shall pay to the Regional District, on application, a posted fee reflecting the technical review and administrative costs necessary to process these applications. SLRD member municipalities (Squamish, Whistler, Pemberton and Lillooet) shall be exempt from all application fees, as they are already contributing funds to the Solid Waste Management budget through disposal fees and tax requisition.

Application Enclosures

The application shall contain the following enclosures:

Operating Plan

The applicant shall submit an Operations Plan including, but not limited to:

- a) the legal description and civic address of the facility;
- b) the name of the owner of the land on which the facility is located or proposed to be located;
- c) the full name and address of the operator of the facility;
- d) a brief and complete description of the activity to be carried out and the municipal solid waste or recyclable material to be handled at the facility;
- e) maximum annual tonnage of material to be handled at the facility;
- f) the maximum amount of material or product (by type) to be stored at the facility at any one time;
- g) maximum discharge to air, water or land, if applicable;
- h) other information as requested by the Regional District.

Approval of Host Municipality

The applicant shall obtain written approval from the Municipal Administrator or designate of the municipality in which the facility is proposed to be located. This approval shall state that the facility meets all zoning bylaws and business licensing requirements and that the municipality endorses (at least in-principle), inclusion of this facility in the Plan. The Regional District shall not process an application if, in a report submitted to the Regional District, the municipality states that it does not approve of the application.

Ministry of Environment Concerns

All facilities must meet the British Columbia standards for environmental protection, and the applicable processes for the establishment of such facilities. If higher standards exist in the host jurisdiction, those standards must be met. A letter from the Director of Waste Management of the Ministry of Environment will be required.

Preliminary Approval by Regional District Board

Once the Director of Waste Management of the Ministry of Environment has determined that the proposed facility can be added to the Plan using this procedure, and upon receipt of an application, the application fee and the application enclosures (described above), the application shall be submitted to the SLRD Board of Directors for approval *to continue with the application process*.

Preliminary Evaluation of Plan Authorization Application

Having obtained the approval (at least in-principle) of both the host municipality and the Regional District Board of Directors, the application is subject to review by Regional District staff. In reviewing the application, Regional District Staff may consider the following:

- a) the potential risk posed to the environment and public health;
- b) protection of the environment (i.e. security considerations);
- c) Ministry of Environment concerns;
- d) compliance with Municipal or Regional District zoning and land use designations;
- e) effects on other facilities identified in the Plan;
- f) the report of the Municipal Council and other municipal concerns;
- g) effects on the local community resulting from, but not limited to: transportation, odour, noise and aesthetics;

- h) any environmental impact assessment and any other investigations, test, surveys or any other action taken;
- i) any other information submitted to the Regional District;
- j) operating plans submitted to the Regional District;
- k) closure plans submitted to the Regional District;
- l) the payment of any annual fees for operation or reporting of quantities as required by the Regional District;
- m) compliance with the guiding principles of the Solid Waste Management Plan; and
- n) any other matter which the Regional District considers relevant.

If the reports and technical studies indicate that the facility may be acceptable, (subject to addressing BC Environment concerns), the applicant will be directed by Regional District staff to proceed with public consultation.

Public Consultation Procedure

The applicants shall, at their own cost, and within 30 days of receiving Regional District direction:

(1) Publish two (2) successive notices in a newspaper that is distributed at least weekly in the area where the facility is located or proposed to be located. In the event that a newspaper does not service the area, the application shall be posted in a manner acceptable to the Regional District.

The notice must be SLRD-approved and entitled SOLID WASTE MANAGEMENT PLAN - REQUEST FOR A NEW FACILITY AUTHORIZATION. The notice must be at least 10 cm in width, at least 100 square centimetres in area (i.e. equivalent to 4"x 4"), and include at least the following information:

- a) the legal description and civic address of the facility;
- b) the name of the owner of the land on which the facility is located or proposed to be located;
- c) the full name and address of the operator of the facility;
- d) a brief and complete description of the activity to be carried out and the municipal solid waste or recyclable material to be handled at the facility;
- e) that any concerns should be addressed in writing to the SLRD; and
- f) other information considered necessary by the Regional District.

(2) Post a readable copy of the application, at the discretion of the Regional District, in a conspicuous place at all main road entrances to the land on which the facility is located, or proposed to be located, and/or erect a full-size sign in a location visible to the general public and keep these posted for a period of not less than 30 days.

(3) Serve a written notice that an application has been filed, on all neighbours, commercial or residential, within 50 metres from any lot line of the subject property. The written notice shall contain the information set out in paragraph (1) a) to f) above. In cases where there will be a significant discharge to the environment, or considerable financial impact on the Plan's current solid waste facilities, the applicant may be required, at their own cost, to additionally complete the following:

(4) Arrange for a public meeting(s) as directed by the Regional District, in the municipality in which the facility is located, or proposed to be located.

(5) Publish a notice of the specifications set out in paragraph (1) a) to f) in all major newspapers of the Squamish Lillooet, at the discretion of the Regional District.

(6) Publish the subject application in The British Columbia Gazette, under the heading Waste Management Application.

(7) Serve a written notice that an application has been filed, on any tenants, commercial or residential, within 1 km of the proposed facility that the Regional District considers affected. The written notice shall contain the information set out in paragraph (1) a) to f).

(8) Forward copies of the application to the following agencies for circulation and review:

- a) Environment Canada;
- b) Ministry of Health;
- c) Ministry of Environment
- d) Council of Host Municipality; and
- e) Any other government agencies the Regional District or Director of Waste Management of the Ministry of Environment consider necessary.

(9) Additional Public Consultation as recommended by the Director of Waste Management of the Ministry of Environment.

Final Evaluation of Application

Upon receipt of the required documents indicating the appropriate Public Consultation Process has been completed, Regional District Staff shall complete a comprehensive Technical Review of the proposed facility. If the review indicates the proposed facility is feasible, all concerns have been addressed, and the Director of Waste Management of the Ministry of Environment is satisfied that the application meets Ministry requirements for environmental protection, Staff will prepare a Final Evaluation Report to be presented to the Regional District Board. With the Final Evaluation Report, the application will be presented to the Board of Directors for final authorization and inclusion in the Plan. Board approval of the proposed application shall take into account the following:

- 1) Approval of the application by Regional District staff and the Plan Monitoring Advisory Committee.
- 2) Presentation on proposed facility by the applicant to the SLRD;
- 3) Written notice from the Director of Waste Management of the Ministry of Environment, stating the application meets Ministry requirements for environmental protection;
- 4) Payment in full of the Application Fee as determined by the SLRD;
- 5) The results of the Public Consultation Process and Technical Review; and
- 6) If the facility is to be situated within a municipality, the final approval of the Host Municipality, after receiving the completed application.

Final Approval by Regional District Board

Upon approval of an application by the Regional District Board of Directors, the facility shall be considered authorized in the Plan. As a condition of this Final Approval, the Board, in accordance with the Environmental Management Act, shall require an interim Operational Plan for the facility. The Director of Waste Management of the Ministry of Environment, in accordance with the Environmental Management Act, may issue an Operational Certificate (OC) for the facility. If an OC is issued by MOE, it will supersede the previous interim Operational Plan required by the Board. Prior to operational start-up of the facility, the Regional District shall receive a copy of the OC, or other Operational Plan documents as required by the Board.

Notification of Agencies

On approval of an application, the Regional District shall notify, in writing, the following agencies: a) Environment Canada; b) Ministry of Environment c) Ministry of Health; d) any other government agencies the Regional District considers necessary; e) Council of Host Municipality; and f) the Applicant.

Procedure for Changing Operating Conditions for Plan Facilities

If there are minor changes to operating conditions for solid waste management facilities listed in this Plan, notice of the change shall be provided by the facility owner in writing to the SLRD General Manager of Utilities and Environmental Services (General Manager). If the General Manager determines that the change does not affect the objectives of the SLRD Solid Waste Management Plan, he/she will provide written acceptance of the change of operation to the facility owner and provide a copy of this notice to the Plan Monitoring Committee. If the General Manager determines that the change in operational conditions has a negative impact on the objectives of the Plan, he/she will notify the facility owner that the change in operating conditions will require a Plan Amendment.

APPENDIX C:

Plan Monitoring Advisory Committee Terms of Reference





Solid Waste Management Plan Monitoring Advisory Committee

Terms of Reference

Purpose: As outlined in section 22 of the SLRD Solid Waste and Resource Management Plan (SWRMP) the purpose of the Plan Monitoring Advisory Committee (PMAC) is to monitor the implementation of the Solid Waste and Resource Management Plan and report directly to the Regional Board.

Goal: The goal of the PMAC is to ensure the ongoing evaluation, assessment, implementation and updates and/or amendments to the actions and policies outlined in the SWRMP.

Responsibilities: Plan Monitoring Advisory Committee members will:

- Review and become familiar with the Solid Waste and Resource Management Plan;
- Review and become familiar with the existing solid waste management system in the SLRD;
- Identify methodologies to be employed in the monitoring and evaluation of the Plan's implementation;
- Monitor the implementation of the Plan and annually report to the Board on the effectiveness of the SWRMP at achieving its objectives; and
- Make recommendations to increase the effectiveness of the Plan or the solid waste management system.

Expected Outcomes: It is expected that the PMAC will recommend to the Board strategies and an associated implementation plan for enhancing recommendations and objectives identified in the SWRMP. Additionally, the PMAC will strive to enhance communication and collaboration through committee members.

Membership: The committee membership will strive to have a broad representation of interests including the following:

- Local government/public works representatives from municipalities within the SLRD (4 members)
- SLRD staff (2 members)
- First Nations representatives within the SLRD (4 members)
- Members at Large - Interested members of the public, including local environmental groups and recycling organizations, owners and operators of private waste facilities, commercial and institutional solid waste generators, haulers and operators. (6 members, representing at least 3 electoral areas).

The Committee shall consist of a minimum of 7 and a maximum of 16 members appointed as follows:

- Local government/public works representatives from the four municipalities and the SLRD will be appointed by their organization.
- First Nation Members and Members at Large will be appointed by the Regional Board.



Term of Appointment: Membership of the SLRD and Municipal governmental agencies shall have permanent terms of appointment. However, the agencies can change their representation at their discretion.

First Nations and Members At Large will have the following Term of Appointment:

- In the first year of the Committee, one half of the Members at Large shall be appointed for a term to expire on December 31st of the year in which they were appointed and one half of the members shall be appointed for a term to expire on December 31st of the year following the year of their appointment.
- All subsequent appointments to the Committee shall be for a two year term.
- If appointments to the Committee have not been reviewed by the Regional Board before the expiration of the term of the members, members appointed to the Committee shall continue to hold office until the annual membership has been determined.

Group Culture: The PMAC membership shares the common understanding that all participants will:

- Act in a professional and respectful manner;
- Actively listen;
- Act with integrity and;
- Attend meetings with a positive purpose;

Decision Making: The main role of the PMAC is to be an advisory committee to provide recommendations to SLRD Staff for amendments to the SWRMP. SLRD staff will bring recommendations to the SLRD Board, as the SLRD Board is the decision making body. Ideally, results recommended by the PMAC will be made by collaboratively.

Committee Protocol

- The SLRD will chair and host the meetings.
- All PMAC members are equal and have equal opportunity to contribute at meetings, as well as responsibility to respect the opinions of others. Committee members are encouraged to actively participate in the discussions and use their experience, education, and insight to speak freely about any issues or opportunities to be considered.
- Committee members are present to give a voice to the community. However, members are equally responsible to listen and understand the views of others. It is only through this dialogue that real consensus can be achieved.
- Members are encouraged to work collaboratively and to be committed to reaching consensus where possible by using an interest-based approach rather than an individual member position-based approach. Consensus will be formally recorded in the meeting's Minutes. Any members unable to agree with the consensus decision may have their objections noted in the Minutes.
- Committee members may choose to express their personal views about the process to others outside the PMAC but may not speak on behalf of or in any way create the impression that they



are speaking for the PMAC as a whole. In order to ensure open and honest dialogue, Committee members should not discuss comments or opinions expressed by other Committee members without their knowledge and consent.

- Members will be asked to arrive promptly at meetings.
- Members of the public may observe meetings but will not have speaking rights unless invited to speak by the Chair.
- Members who miss three Committee meetings over the course of 18 months may have their membership revoked at the SLRD Board’s discretion, or for appointments from government agencies, a request may be made by the SLRD Board that their representative be changed.
- A Conflict of Interest arises when a PMAC member speaks on a motion that could be the cause of some direct significant benefit - monetary or otherwise - to that member. If such a situation arises, the member involved should excuse themselves from proceedings that relate to the conflict unless explicitly requested to speak, only after a majority vote from meeting participants to do so. Any subsequent information provided by the individual will clearly be identified in the Minutes as coming from a source perceived to be in a conflict of interest.

Reporting: The Plan Monitoring Advisory Committee reports to the SLRD Board.

Meetings: In general, there will be three meetings per year of the PMAC with the provision for additional meetings, workshops or other presentations at the committee’s discretion. The SLRD will chair and host all PMAC meeting in the geographic center of the SLRD, Pemberton, BC. Agendas will be posted on the SLRD website at www.slrd.bc.ca

Resources: SLRD staff will provide administrative support to the PMAC including, but not limited to: arranging meetings, creating agendas, taking minutes, and distributing materials.

Any PMAC budget requirements will be included within the SWRMP budget subject to the SLRD’s normal annual review and approval process.

PMAC participation is voluntary with no remuneration provided for members’ time.

<p>Contacts Director, Utilities & Environmental Services, SLRD Box 210 Pemberton, BC V0N2L0 utilities@slrd.bc.ca Tel: 604.894.6371 x 240 Toll Free (in BC): 1.800.298.7753</p>	<p>Utilities & Environmental Services Coordinator, SLRD Box 210 Pemberton, BC V0N2L0 Tel: 604.894.6371 x 236, Toll Free (in BC): 1.800.298.7753</p>
---	--

[DATE]

[INSERT MUNICIPALITY]
[MUNICIPALITY ADDRESS]

The Honourable Mary Polak, M.L.A.
Minister of Environment
Government of British Columbia
PO Box 9047 STN PROV GOVT
Victoria, BC, V8W 9E2

Dear Minister,

RE: SQUAMISH-LILLOOET REGIONAL DISTRICT SOLID WASTE AND RESOURCE MANAGEMENT PLAN

The [INSERT MUNICIPALITY] received a request from the Squamish-Lillooet Regional District (SLRD) on March 31, 2016 to support its application for approval of the SLRD Solid Waste and Resource Management Plan (SWRMP). The SWRMP, including the proposed initiatives for the [INSERT MUNICIPALITY], has our full support.

The [INSERT MUNICIPALITY] has been involved with the SLRD's solid waste management plan update since 2013, including having municipal staff representatives on the Solid Waste Management Plan Advisory Committees. The [INSERT MUNICIPALITY] was also a participatory member of the public consultation phase during the update process, receiving adequate notice ahead of consultation opportunities, and provided the opportunity to give feedback on the draft plan.

The [INSERT MUNICIPALITY] is in agreement with the initiatives, targets, and principles proposed in the SWRMP and believes that they will enable the regional district and member municipalities to reduce the amount of waste generated per person in the regional district throughout the life of the plan. The focus on incorporating zero waste concepts in each component of the plan is in line with the values and principals of the [INSERT MUNICIPALITY].

The [INSERT MUNICIPALITY] supports the adoption of the SLRD SWRMP and asks that the Honourable Minister of Environment approves the adoption of the plan.

Yours truly,

[INSERT SIGNATORY NAME AND TITLE]



RECEIVED
APR 14 2016
VILLAGE OF PEMBERTON

April 8, 2016

Ref: 166815

His Worship Mayor Mike Richman
Village of Pemberton
Box 100
Pemberton, BC V0N 2L0

Dear Mayor Richman:

The Province of British Columbia knows that British Columbians have expressed an interest in seeing greater choice, convenience and competition in the availability and provision of transportation and accommodation services. Companies such as Uber, Lyft and Airbnb may present opportunities to meet changing public expectations.

In considering the opportunities that these services may provide, it is important that the Province understands any impacts that could result for consumers, host communities and existing service providers. The many people currently providing passenger and accommodation services in British Columbia have made investments, providing jobs and valuable contributions to the economy. Thought must be given as to how any new services are regulated, recognizing the need to be respectful of existing industry participants while at the same time being fair and equitable to any possible new entrants to these sectors.

To this end, over the coming months, I will be meeting with a wide array of stakeholders to explore issues pertaining to the sharing economy and develop a better understanding of the opportunities and challenges that they provide for citizens and communities.

Locally elected officials from both urban and rural regions will have important perspectives on the issues and opportunities surrounding the sharing economy, and I am eager to draw these out as part of the consultation process. It is my hope that I will be able to engage with as many local governments as possible in person over the coming months. Regardless of whether we are able to undertake this discussion in person, I would also value the opportunity to review your thoughts on this matter via any written submission you may care to provide to me, and I encourage you to consider sending your thoughts to me directly by email at: CSCD.Minister@gov.bc.ca.

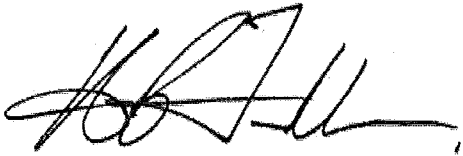
Your perspectives could include ideas on how sharing and existing service economies could be integrated, on perceived challenges and opportunities, and on provincial and local government roles in regulating and facilitating any changes we might contemplate.

.../2

His Worship Mayor Mike Richman
Page 2

I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Fassbender', with a stylized flourish at the end.

Peter Fassbender
Minister



The Strategic Wildfire Prevention Initiative is managed by the Provincial Fuel Management Working Group. For program information, visit the Funding Program section at:

www.ubcm.ca

LGPS Secretariat

Local Government House
525 Government Street
Victoria, BC, V8V 0A8

E-mail: lgps@ubcm.ca
Phone: (250) 356-5134
Fax: (250) 356-5119

Local Government Program Services

...programs to address provincial-local government shared priorities

March 8, 2016

Mayor Richman and Council
Village of Pemberton
Box 100
Pemberton, BC V0N 2L0

RE: Strategic Wildfire Prevention Initiative - Approval of Community Wildfire Protection Plan Application (SWPI-625: Pemberton CWPP Update, 2016)

Dear Mayor and Council,

Thank you for submitting an application for a Community Wildfire Protection Plan Update for the above noted project. The Provincial Fuel Management Working Group has reviewed your submission and the application requirements have been met.

The application form indicates a total project cost of \$19,460.00. As the applicant is required to contribute 50% of the total project cost, the working group has approved a grant in the amount of \$9,730.00, or 50% of the actual eligible project costs, whichever is less. The balance of the project cost is required to be funded through community contributions.

The conditions of approval are outlined in the Program & Application Guide and the general Terms & Conditions are attached. In addition, please note the approved grant is also subject to the following requirements:

- (1) The funding is to be used solely for the purpose of the above named funding program and project and for the expenses itemized in the budget that was approved as part of your application;
- (2) Funds are not transferable to other projects;
- (3) A post-approval meeting with the local Fuel Management Specialist is required to be completed. Please contact Pete Laing at the Coastal Fire Centre to schedule this meeting.
- (4) It is expected that all CWPPs and CWPP updates will be presented to the local government Council or Board.
- (5) All project activities must be completed within 12 months and no later than March 7, 2017;

(6) The final report is required to be submitted within 30 days of project completion and no later than April 7, 2017. The report must include:

- Completed Final Report Form, including signatures by the applicant and the Registered Forest Professional
- Copy of the completed CWPP/ update including all required content identified in the Program & Application Guide
- Maps, spatial data, metadata, and methodology relating to the project

Additional information regarding financial reporting, disclosure of project revenues and other grant contributions, and grant calculations are available in the Program & Application Guide.

Also, please note that the *Community Charter* and *Local Government Act* provide the requirements for municipalities or regional districts that are providing services outside of their own jurisdiction.

As outlined in the Program & Application Guide, grants will be awarded upon completion of your project and satisfactory receipt of the final report. For information on changes to the approved project or progress payments, please refer to the program guide or contact Local Government Program Services at (250) 356-2947 or lgps@ubcm.ca.

We wish you every success with your project and look forward to working with you on future community safety initiatives.

Sincerely,



Peter Ronald
Programs Officer

cc: *Kim Slater, Communications & Grant Coordinator, Village of Pemberton*
Peter Laing, Acting Fuel Management Specialist, Coastal Fire Centre

Enclosure

Pamela Goldsmith-Jones, MP
West Vancouver-Sunshine Coast-Sea to Sky Country
House of Commons, Ottawa, K1A 0A6

March 10, 2016

Re: CN Railway crossings particularly in the SLRD, B.C.

Ms. Goldsmith-Jones,

I spoke with you at the all candidates meeting in Pemberton last fall about the ongoing issue the public experiences with the CNR here in Pemberton (and indeed in several other locations throughout the SLRD).

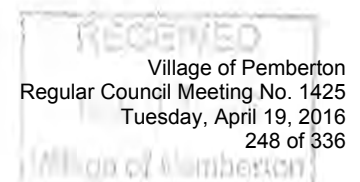
We have lived on Urdal Road within a km of the Pemberton Village boundaries on the Lillooet River where the RR Bridge crosses the river for 45 years. As you are aware, B.C. Rail was the owner of the RR until 2003 when the province "turned it over" to CNR in (I think) a 99 year lease for the Rail line usage. As the population of Pemberton has grown, the use of the RR Bridge to access the trails and riverfront on the lands across the river has grown substantially. We were very pleased B.C. Rail built the walkway attached to the Bridge in 2000 and indeed, we gave them permission to access the Bridge through our property at that time! Since CN took over in 2003, they have been issuing trespassing tickets (\$115) from time to time and in fact, have spent much effort and expense blocking the access from the dyke and on to the walkway instead of working on making that walkway and access safe. Apparently, the walkway is for their RR workers to use and not the public!!? Back in 2006 (see enclosed e-mail and I have others)...locals here attempted to work with a CN Rep to clarify how we could make the crossing "legal" but we were very disappointed that the meeting did not in fact happen (I believe it was a local political situation but can't say). Unfortunately, Mr. Mitchell no longer works for CN. We wrote to our former MP Mr. Chuck Strahl but didn't get any help there.

We have seen in Telkwa (near Smithers) a walkway which was attached to a CN Bridge back in the early 1990's ...designed by the CN engineers and paid for by their Regional District....CN maintains that they don't do that any more....I'm not sure why??

This particular access issue is only one of many in our Regional District....I am aware of issues in Birken, in Lillooet, in Whistler as well as Squamish. I am writing in particular about this one as we have been giving the public access to the Lillooet River across a trail on our land next to the tracks (soon to be turned over to the Reg. Dist.). Public access to waterfront is very limited here and it is something we ourselves very much prize both here and elsewhere in the province. The access to the RR from the dyke is secondary as access can be obtained from Urdal Road whether there was a trail there or not.

Last fall, we met a young man here who was going to West Van in Sept. to contest a fine he was issued when he used the walkway attached to the Bridge. He wanted to learn what the walkway was for if indeed not for the public. He took with him pictures of people crossing on the walkway when he attended his "trial". The judge reduced his fine to \$60 from \$115 and said that she couldn't do more but that he should be an advocate for working on getting this crossing legalized. He said that he learned a "small ???" change in the wording of the RR Act would allow this to move forward. We are thinking that a private members bill with that request (and significant consultation obviously) might do the trick!?

We are requesting that you would look into this for us. We know that as a former Mayor of West Vancouver that you may have had some experience with CN??



And, before I end this, I want to note that we do very much realize that a death caused by someone not paying attention to safety issues on the RR Tracks would be very traumatizing to the workers staffing a train. We also know that the thousands (and I do not exaggerate here) of crossings by the public over the years have so far not resulted in an accident altho' there may have been some close calls. We have seen some "idiots" not pay attention and have heard much beeping from the trains occasionally. "Cross when Safe" signs as they have in West Van would be good....in fact we've a lot better "sight line" hereThere are only about 4 trains passing within a 24 hour spanso we feel that this crossing to access the now major Mt. Bike trails and Riverside Park area is much safer than riding along Highway 99 several KM to access that popular area.

Thank you for taking the time to hear of our concern....we know this will take time but we do feel this is of high priority....

Janet and Hugh Naylor
7522 Urdal Rd.
Box 221, Pemberton, B.C. V0N 2L0
hjnaylor@telus.net

cc. Squamish Lillooet Regional District
→ cc. Village of Pemberton
cc. Jordan Sturdy, MLA

cc TRAILS B.C.

Enclosures: pictures and old correspondence

Janet Naylor
Hugh Naylor

*a lot here but I think its
important for back ground
JN:*

Info

From: "Jan & Hugh Naylor" <hjnaylor@telus.net>
To: "Jan Naylor" <jnaylor@pembertonlibrary.bc.ca>
Sent: Wednesday, January 25, 2006 9:03 AM
Subject: Fw: Your CNR concerns

----- Original Message -----

From: Office Of Chuck Strahl MP- Len Wright
To: hjnaylor@telus.net
Sent: Tuesday, January 24, 2006 2:44 PM
Subject: RE: Your CNR concerns

Hello Mr. and Mrs. Naylor,

Thank you for sharing your concerns regarding the Pemberton trails and the community's relationship with CNR. I have been in contact with a Mr. Ron Mitchell from Transport Canada and have finally received a response as regards to your concern. Mr. Mitchell would be interested in coming together for a meeting between all parties to discuss this issue further. He has asked me to forward his contact information to you so that you can contact him directly. I have also copied his response email to me, below for your further information.

Please keep our office advised as to the outcome of this meeting. I hope that this information can assist all parties in coming together to find resolve in this community issue.

Have a great day.

Len Wright
 Constituency Assistant to
 Chuck Strahl, MP
 Chilliwack-Fraser Canyon

Mr. Mitchell's (Transport Canada) email response:

In response to Mr. and Mrs. Naylor's email.

The short answer is yes - We can help. However, I must first say that your constituents must not think of railway property as "public". It is very private property that houses an operating business that is very unforgiving to anyone that makes a mistake in judgment.

Having said that, I have no problem with safe and legal access, and will work with all to that end. I have copied Al Erickson who is the CN contact in Edmonton as well as the local CN Police with this reply. I am suggesting to all that we convene a meeting in the next month or so to discuss what is requested here. Prior to any meeting I would like to establish the following:

- Are there any crossings of the railway tracks? If so they would have to be legitimized by private agreement or legal access agreement with the local municipality. They would also require safety assessments. (refer proposed standard RTD-10). The best place to view our standards and regulations is at

* railwaycrossingsbc.gc.ca

- You mention the use of a walkway on a bridge. There are other locations in this province where a public walkway is affixed to a railway bridge. Telkwa (on CN) comes to mind. Again there would have to be agreements in place for usage.
- The trail along the railway right-of-way would also require some sort of agreement for use.

I would like as much information as possible prior to arranging a meeting, so perhaps it would be best if you call

Village of Pemberton
 Regular Council Meeting No. 1425
 Tuesday, April 19, 2016
 250 of 336

1/25/2006

your constituent in direct contact with me. My contact information follows:

Ron Mitchell, P.Eng.

Manager, Railway Safety Engineering

Pacific Region

Transport Canada

604-666-6237 (phone) #225 - 625 Agnes Street

604-666-7747 (fax) New Westminster BC V3M 5Y4

mitchre@tc.gc.ca <<mailto:mitchre@tc.gc.ca>>

~~... I have also copied his response email to me, below for your further information.~~

Please keep our office advised as to the outcome of this meeting. I hope that this information can assist all parties in coming together to find resolve in this community issue.

Have a great day.

Len Wright
 Constituency Assistant to
 Chuck Strahl, MP
 Chilliwack-Fraser Canyon

Mr. Mitchell's (Transport Canada) email response:

In response to Mr. and Mrs. Naylor's email. The short answer is yes - We can help. However, I must first say that your constituents must not think of railway property as "public". It is very private property that houses an operating business that is very unforgiving to anyone that makes a mistake in judgment.

Having said that, I have no problem with safe and legal access, and will work with all to that end. I have copied Al Erickson who is the CN contact in Edmonton as well as the local CN Police with this reply. I am suggesting to all that we convene a meeting in the next month or so to discuss what is requested here. Prior to any meeting I would like to establish the following:

- Are there any crossings of the railway tracks? If so they would have to be legitimized by private agreement or legal access agreement with the local municipality. They would also require safety assessments. (refer proposed standard RTD-10). The best place to view our standards and regulations is at railwaycrossingsbc.gc.ca
 - You mention the use of a walkway on a bridge. There are other locations in this province where a public walkway is affixed to a railway bridge. Telkwa (on CN) comes to mind. Again there would have to be agreements in place for usage.
 - The trail along the railway right-of-way would also require some sort of agreement for use.
- would like as much information as possible prior to arranging a meeting, so perhaps it would be best if you put

Hugh & Jan Naylor

From: Mitchell, Ron [MITCHRE@tc.gc.ca]
Sent: March-06-06 2:16 PM
To: Jan & Hugh Naylor
Subject: RE: CN concerns re trails & crossings

I do plan on attending on Thursday. I have asked J Sturdy for date and time, agenda etc. c u there. ✓

-----Original Message-----

From: Jan & Hugh Naylor [mailto:hjnaylor@telus.net]
Sent: Monday, February 20, 2006 9:27 AM
To: Mitchell, Ron
Cc: Office Of Chuck Strahl MP- Len Wright
Subject: CN concerns re trails & crossings

Mr. Mitchell - WE thank you for your quick response to our email of Jan 24 and apologise for the delay in getting back to you. The Pemberton Valley Trails association has set up a meeting with CN to take place in Pemberton on Mar. 9 to discuss the possibility of trails and pedestrian crossings within the CN r/w. The PVTA feels that it would be a huge benefit for you to be at that meeting. Perhaps you have already been notified but in case you have not the agenda details would be available from Jordan Sturdy jsturdy@pemberton.ca. To answer your specific questions, there would be one pedestrian crossing and a bridge walkway required at locations where excellent line - of - sight considerations exist. Both the crossings and the r/w [100m.] trail would have to be legitimised by a legal agreement, however this would fall under the mandate of the regional district's trails mandate as outlined in the amendment bylaw 734. The request discussed here and outlined in our [Naylor's] email of Jan. 24 should be seen in the context of a broader trail r/w issue which would be on the March 9 meeting. The PVTA is a responsible volunteer registered non-profit group whose concerns whose objectives are contingent on safety and respect for private property. I am sending you a map which should help in your preparation for an onsite examination. This will come under separate cover. Again we thank you for your attention and look forward to further discussions. Hugh Naylor

On 10/15/07, Jan & Hugh Naylor <hjnaylor@telus.net> wrote:

FYI

--- Original Message ---

From: Mitchell, Ron

To: Jan & Hugh Naylor

Cc: jsturdy@pemberton.ca

Sent: Wednesday, March 08, 2006 6:27 PM ←

Subject: RE: CN concerns re trails & crossings

?
→ I got a call from Mayor Sturdy last night, indicating that there was going to be a meeting today, not Thursday. He indicates that the matter is progressing nicely and that there really didn't seem to be a need for me to attend right now.. which is great because my schedule is ripping apart at the seams anyway. Please keep me posted on developments.

← why?

-----Original Message-----

From: Jan & Hugh Naylor [<mailto:hjnaylor@telus.net>]

Sent: Monday, February 20, 2006 9:27 AM

To: Mitchell, Ron

Cc: Office Of Chuck Strahl MP- Len Wright

Subject: CN concerns re trails & crossings

Mr. Mitchell - WE thank you for your quick response to our email of Jan 24 and apologise for the delay in getting back to you. The Pemberton Valley Trails association has set up a meeting with CN to take place in Pemberton on Mar. 9. to discuss the possibility of trails and pedestrian crossings within the CN r/w. The PVTA feels that it would be a huge benefit for you to be at that meeting. Perhaps you have already been notified but in case you have not the agenda details would be available from Jordan Sturdy jsturdy@pemberton.ca. To answer your specific questions, there would be one pedestrian crossing and a bridge walkway required at locations where excellent line - of - sight considerations exist. Both the crossings and the r/w [100m.] trail would have to be legitimised by a legal agreement, however this would fall under the mandate of the regional district's trails mandate as outlined in the amendment bylaw 734. The request discussed here and outlined in our [Naylor's] email of Jan. 24 should be seen in the context of a broader trail r/w issue which would be on the March 9 meeting. The PVTA is a responsible volunteer registered non-profit group whose concerns whose objectives are contingent on safety and respect for private property. I am sending you a map which should help in your preparation for an onsite examination. This will come under separate cover. Again we thank you for your attention and look forward to further discussions. Hugh Naylor

Ron Mitchell, P.Eng.
Manager, Railway Safety Engineering
Pacific Region
Transport Canada
#225-625 Agnes Street
New Westminster, B.C. V3M 5Y4

April 19, 2006

Since our previous e-mail communication of January 24, there has been a meeting with CN, local Municipal, Regional and First Nation governments present. We were told that it was not necessary for you to be involved. The CN delegate promised a response within two weeks as to whether the extensive Mount Currie-Pemberton trail system (dubbed the "Friendship Trail") utilizing CN R/W would be considered. More than a month has passed and no word.

Our (PVRTA) request is very simple: a pedestrian crossing and about 100 m of R/W permitting a safe access to proposed Crown parkland from the east and a safe crossing of the Lillooet River from the west linking the parkland to the V.of P.

It is a safety issue needing to be addressed. The route is heavily used now. Attempts at enforcement of the Trespass Act have failed mainly because users recognize that the alternative route utilizing the narrow shoulders on Highway 99 is more dangerous, less appealing and a much longer route.

Four years ago, the PVRTA, a representative of the SLRD and B.C. Rail conducted an on site investigation of the Bridge Crossing and came to the conclusion that it was doable but likely too expensive.

We suggest an on site examination from yourself which we would be happy to conduct. The agenda would be focused on the immediate safety issues and would be the basis of future political ramifications.

Looking forward to your response.

Rod McLeod, Chair
Pemberton Valley Trails Association

Note: we mailed you a map showing the location of the proposed route in February. If you cannot access that map, we can forward you another

Jan & Hugh Naylor

From: "Mitchell, Ron" <MITCHRE@tc.gc.ca>
To: "Jan & Hugh Naylor" <hjnaylor@telus.net>
Sent: Thursday, August 24, 2006 1:13 PM ←
Subject: RE: Pemberton and CN and Trail concerns

I have been to Prince Rupert and points all over but not yet in your area. I am planning a trip this fall (early October). Any progress?

No!

-----Original Message-----

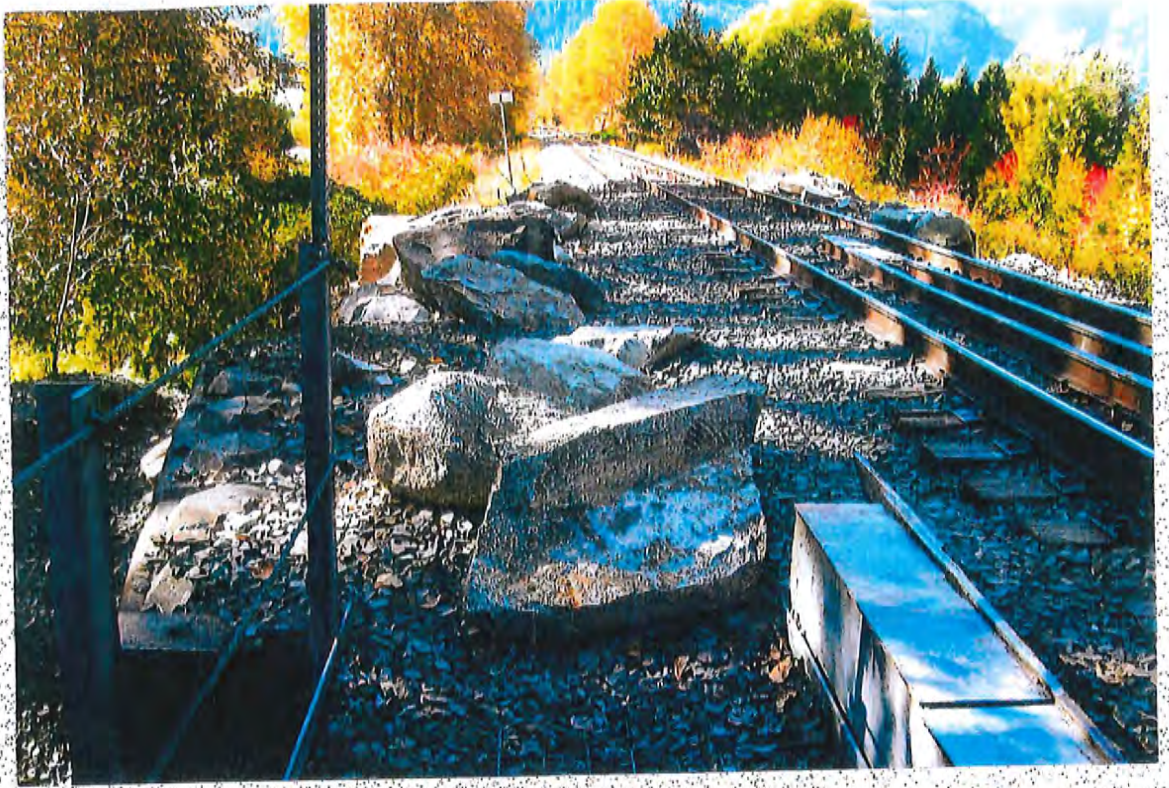
From: Jan & Hugh Naylor [mailto:hjnaylor@telus.net]
Sent: Sunday, May 28, 2006 1:33 PM ←
To: Mitchell, Ron
Subject: Pemberton and CN and Trail concerns

Mr. Mitchell, The PVTA (Pemberton Valley Trails Association) was informed by Mayor Jordan Sturdy over a month ago that some sort of an agreement had been reached between the "Friendship Trail" group and CN but that they are waiting for a press release regarding this. We have not been told just what is involved in the agreement. Another month has gone by and still no word. We appreciate your offer to come and meet with us and CN. Quite some time has passed since we first approached you so I just wanted to give you an update regarding the situation here. Our concerns are still pertinent. Jan and Hugh Naylor

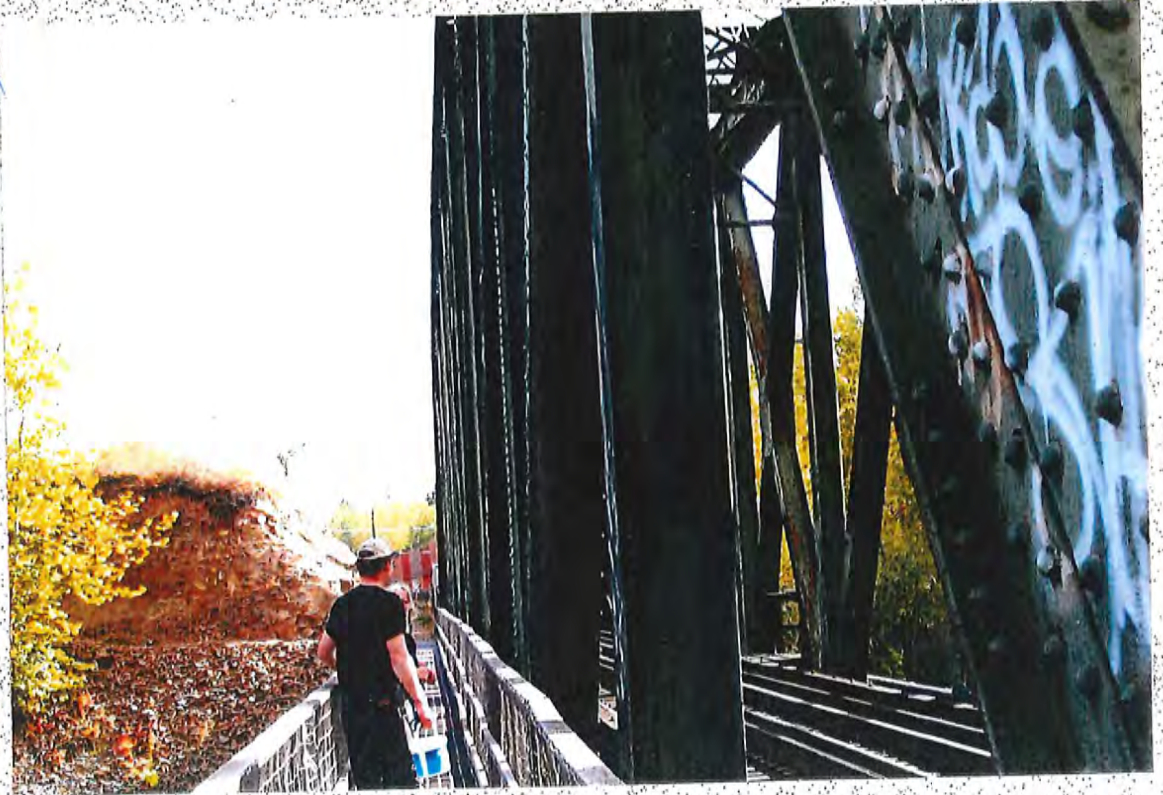
*not our
concern
or involvement*

1/25/2006

Blocked walkway to hilltop
River bridge - Fall 2015



Tellico & N Bridge walkway
(Mr. Mitchell mentioned it)



Jan & Hugh Naylor

From: "Minister of Transport, Infrastructure and Communities / Ministre des Transports, de l'infrastructure et des Collectivités" <MINTC@tc.gc.ca>
To: <hjnaylor@telus.net>
Sent: Friday, October 29, 2010 10:56 AM
Subject: CN railway bridge crossing at Lillooet River

Mr. Hugh and Ms. Jan Naylor
hjnaylor@telus.net

Dear Mr. and Ms. Naylor:

I am writing in response to your correspondence of August 20, 2010, to Canadian National (CN) regarding safety and legal issues respecting the CN railway bridge crossing at Lillooet River.

I should explain that CN has a policy in place of not allowing trails to be operated on its rights-of-way. The purpose of this policy is to ensure the safety of trains, employees and the public.

CN representatives are willing to meet with the landowner and municipality to discuss how they—the landowner and municipality—propose to address the safety issues associated with the use of the short trail. Section 26.1 of the *Railway Safety Act* states that no person shall, without lawful excuse, enter on land on which a line work is situated. In light of the foregoing, persons using the bridge in question are in violation of the Act. It is CN's responsibility to address trespassing issues on its property through various means, which may include increased policing with a zero-tolerance approach.

I should also explain that Transport Canada cannot authorize the use of any railway assets by third parties. It is the responsibility of railways to decide if public access on any railway property or right-of-way is congruent with their safety model for any given location. In this instance, the assets comprise the CN Bridge Mile 95.8 Squamish Subdivision and/or the railway right-of-way on either side of the bridge.

I trust that the foregoing has been some assistance to you.

Sincerely,

Chuck Strahl



THE RESORT MUNICIPALITY OF WHISTLER
 4325 Blackcomb Way TEL 604 932 5535
 Whistler, BC Canada V0N 1B4 TF 1 866 932 5535
 www.whistler.ca FAX 604 935 8109

March 2, 2016

File: 546

Village of Pemberton
 PO Box 100
 Pemberton, BC V0N 2L2

Dear Mayor Richman and Council,

RE: Whistler's Transportation Advisory Group (TAG) Stakeholder

I am writing to inform you that late in 2015 Whistler reactivated the Transportation Advisory Group (TAG). The purpose of the TAG is to identify transportation related issues to, from, and within Whistler, and to then provide Whistler Council with advice and recommendations regarding the assessment of, planning for, and implementation of strategic options to resolve these transportation related issues affecting the Resort Community from a social, environmental and economic point of view. It is our hope that the TAG outcomes will also inform overall transportation planning and address traffic challenges in the Sea to Sky Corridor to the benefit of all residents and communities. From time to time, TAG will be requesting information and input from your staff to help with this process.

The Transportation Advisory Group had its inaugural meeting in December 2015. The week before the meeting, all TAG members were invited to fill out a one question survey as input to start the conversation at the December meeting. The group felt that this survey was so valuable that they requested that all partners and stakeholders listed in the TAG Terms of Reference be invited to fill out the one question survey to start the process of gathering information from stakeholders. A note was sent to your CAO requesting that they take the time to fill out this one question anonymous Survey Monkey survey by Friday, March 5, 2016. Whistler staff will be presenting the results from this survey to TAG at the beginning of our March meeting to once again start discussions and strategic thinking of how to move towards a mutually beneficial future.

Over the next year, it is also anticipated that TAG will be asking for other information from stakeholders and partners in the information gathering as well as the options development phases of their work.

I have included a copy of the RMOW Council report as well as an adopted TAG Terms of Reference for your information. If you are interested, the staff presentation to Council and Council discussion regarding the reestablishment of the Transportation Advisory Group can be found on-line at www.whistler.ca.

Should your staff have any questions, specific to the Transportation Advisory Group, please feel free to contact James Hallisey, General Manager Infrastructure Services at jhallisey@whistler.ca or Emma DalSanto, Transportation Demand Management (TDM) Coordinator at edalsanto@whistler.ca.

Sincerely,

Nancy Wilhelm-Morden, Mayor
 Chair Transportation Advisory Group

Enclosures:

1. Transportation Advisory Group Terms of Reference adopted October 6, 2015
2. RMOW Administrative Report to Council 15-116 – TAG Updated Terms of Reference

Village of Pemberton
 Regular Council Meeting No. 1425
 Tuesday, April 19, 2016
 258 of 336

Transportation Advisory Group (TAG)

UPDATED - Terms of Reference

October 6, 2015

1 DEFINITION

1.1 TAG – Transportation Advisory Group

- a) The TAG¹ is comprised of appointed local stakeholder organizations and community representatives – each in a unique position to contribute to the planning of Whistler’s transportation future.
- b) The Group will be advising on transportation matters within Whistler’s boundaries while considering the implications of transportation infrastructure within the Sea to Sky corridor and how it affects Whistler.

2 PURPOSE OF THE TRANSPORTATION ADVISORY GROUP (TAG)

The purpose of the Transportation Advisory Group (TAG) is to identify transportation related issues to, from, and within Whistler, and to then provide Whistler Council with advice and recommendations regarding the assessment of, planning for, and implementation of strategic options to resolve these transportation related issues affecting the Resort Community from a social, environmental and economic point of view.

3 RESPONSIBILITIES

3.1 TAG is responsible for meeting on a regular basis in order to:

- a) Consider municipal policies with respect to transportation planning, facilities, regional services, parking, movement of goods, high occupancy vehicle priority options, guest arrival and in-resort experience, taxis, innovative funding sources and partnership especially for preferred modes of transport to, from and within the Resort, new services such as ride sourcing, etc.
- b) Assist the municipality with the development of policies and programs that reduce the number of vehicles using the road network, enhance transportation demand management (TDM) initiatives, and reduce greenhouse gas (GHG) emission and improving the Resort’s environmental performance.
- c) Monitor, discuss and assess transportation operational issues with a focus on reducing peak time traffic congestion, reducing GHG emissions and moving towards Whistler’s environmental targets.

4 GUIDING PRINCIPLES

- a) Transportation system plans, designs and facilities should be integrated with land use and recreation facility planning to accommodate growth.
- b) The transportation system should reflect and enhance the natural and urban design features that make Whistler unique.
- c) The transportation system should consider all user types and contribute to the quality of life within the Whistler resort community.

¹ Originally established by Council resolution February 1996 for the purposes of developing a Whistler Comprehensive Transportation Strategy which was completed in 1999.

- d) The transportation system should provide efficient, multi-modal access for inter- and intra-municipal travel. Attractive alternative modes to the single occupant vehicle should be provided and encouraged.
- e) The transportation system should be cost-effective and safe for all users and all modes of travel.
- f) The transportation system should be designed to minimize its environmental impact and reduce greenhouse gases (GHGs).
- g) The Transportation Advisory Group (TAG) will dialogue with the Economic Partnership Initiative (EPI) Committee and/or EPI Working Group to ensure that recommendations from the TAG align with the objectives, goals and actions of EPI report.

5 COMPOSITION OF THE TRANSPORTATION ADVISORY GROUP (TAG)

Participation on the Transportation Advisory Group is as follows:

5.1 TAG Members

- a) Voting
 - i. Two (2) representatives from Whistler Council
 - ii. The Mayor of Whistler
 - iii. Resort Municipality of Whistler's Chief Administrative Officer (CAO)
 - iv. One (1) representative from the Whistler Chamber of Commerce
 - v. One (1) representative from Tourism Whistler
 - vi. One (1) representative from Whistler Blackcomb
 - vii. Three (3) Citizens-at-Large
- b) Non-Voting
 - vi. One (1) representative from the Ministry of Transportation and Infrastructure (MoTI)
 - vii. One (1) representative from the BC Transit (BCT)
 - viii. Resort Municipality of Whistler's General Manager of Infrastructure Services
 - ix. Resort Municipality of Whistler's General Manager of Resort Experience
 - x. Resort Municipality of Whistler's Transportation Demand Management Coordinator
- c) The Chair shall be selected by the Group members on an annual basis.
- d) The General Manager of Infrastructure Services is the primary staff liaison for TAG and shall ensure there are adequate resources for meetings and that meeting minutes are properly recorded and submitted to Council.
- e) Changes to the participation in the TAG will need to be approved by RMOW Council.

5.2 Corridor Partners

- a) District of Squamish (DOS)
- b) Lil'Wat Nation
- c) Squamish Lillooet Regional District (SLRD)
- d) Squamish Nation
- e) Village of Pemberton (VOP)

5.3 Other Stakeholders

- a) Local Not-For-Profits
 - i. Association of Whistler Area Residents for the Environment (AWARE)
 - ii. Mature Action Committee (MAC)
 - iii. Whistler Cycling Club
 - iv. WORCA
- b) Private carrier companies (scheduled and non-scheduled providers)
- c) Other Provincial ministries
- d) Measuring Up Select Committee of Council
- e) Royal Canadian Mounted Police (RCMP)
- f) Whistler Transit System operating company

- g) Vancouver Airport Authority (YVR)
- h) Whistler Housing Authority (WHA)
- i) Hotel Association of Whistler (HAW)
- j) Restaurant Association of Whistler
- k) Whistler Fire and Rescue Services
- l) Whistler Ambulance Services
- m) School District 48
- n) Local taxi companies
- o) BC Ferries
- p) TransLink

6 TERM

6.1 Council Members

- a) TAG members representing Council has shall be appointed by the Mayor and will serve a two-year term running concurrently with their election to Council, or until determined otherwise by the Mayor. One Councillor shall be the Whistler appointee to the Squamish Lillooet Regional District (SLRD) Board so as to provide a direct link to regional issues.

6.2 Representatives of External Organizations

- b) External organizations shall appoint their respective TAG representative. There is no minimum or maximum time period for representation from an external organization.

6.3 Citizens-At-Large

- c) Members that have been appointed as a "Citizen-at-Large" will serve a two year term. These members shall reapply to Council at the end of their term if they wish to remain on the TAG. There is no maximum time period for a Citizen-at-Large on the Committee, subject to reappointment by Council.
- d) Any Citizen-at-Large vacancies will be advertised by the Municipality. Council will review the applications and select the required new members. Citizens-at-Large shall be selected based on their qualifications and experience pertaining to the matters which will be addressed by the Group. Also, Council shall consider the applicant's ability to provide knowledgeable and professional advice and recommendations to Council on the matters that will be considered by the Transportation Advisory Group. The candidates shall be selected by Council resolution.

7 SUB-COMMITTEES

- a) The Transportation Advisory Group (TAG) may convene Sub-Committees to deal with specific transportation related issues. The Chair may invite representatives that are not part of the TAG to participate on a Sub-Committee. Sub-Committees report to Council through TAG.

8 MEETING PROCEDURES

8.1 Transportation Advisory Group

- a) The proceedings of the Transportation Advisory Group will be of a working session format and will follow the agreed upon meeting agenda
- b) Corridor Partners and other stakeholders may be invited to participate in a portion, or all of a TAG meeting as determined by the Transportation Advisory Group members.

8.2 TAG Sub-Committee

- a) The proceedings of a TAG Sub-Committee will be of a working session format and will follow the agreed upon meeting agenda
- b) In addition to regular meetings, substantial Sub-Committee activity will be completed independently and shared digitally with other Sub members-Committee members.

9 MEETINGS

Transportation Advisory Group shall meet quarterly or as required by the Chair.

10 QUORUM

- a) Five voting members of TAG shall constitute quorum.
- b) Recommendations of the TAG shall be made by consensus of members in attendance at a meeting, provided a quorum is present at the meeting.
- c) If consensus cannot be reached, a majority opinion will form the recommendation of the Transportation Advisory Group. Dissenting views will be noted and presented alongside the recommendation.

11 CONFLICT OF INTEREST

- a) TAG members, partners and stakeholders are expected to adhere to standard conflict of interest policies.
- b) Council members must adhere to the RMOW's conflict of interest polices consistent with Council Policy A-21.

12 CODE OF CONDUCT

- a) Each participant of the Transportation Advisory Group and any TAG Sub-Committee must at all times fully comply with applicable federal, provincial and municipal laws and should avoid any situation, which could be perceived as improper or unethical.
- b) All participants are expected to be sufficiently familiar with any legislation and bylaws that apply to their position on TAG.
- c) All participants will ensure that the confidentiality of confidential information is maintained.
- d) All participants must not engage in any financial transactions, contracts, or private arrangements for personal profit, which accrue from or are based upon confidential or non-public information, which the member gains by reason of his/her position as a participant on TAG.
- e) Confidential information that members receive through their position on the TAG and/or a TAG Sub-Committee must not be divulged to anyone other than persons who are authorized by Council to receive the information. A member of TAG or a TAG Sub-Committee must not use information that is gained due to his or her position or authority, which is not available to the general public, in order to further the participant's private interest. Participants must not offer such information to spouses, associates, immediate family, friends, or persons with whom the member is connected by frequent or close association.

13 ADMINISTRATIVE DUTIES AND RESPONSIBILITIES

13.1 Transportation Advisory Group

- a) The RMOW will be primarily responsible to provide administrative support to the Transportation Advisory Group including:
 - i. Prepare the agenda for each meeting
 - ii. Keep the minutes of all meetings and proceedings. Minutes will list meeting attendees, a general summary of discussions, resolutions of TAG and next steps
 - iii. Provide each participant with notice of meetings and the agenda for the meeting
 - iv. Provide each participant with a copy of the minutes

- v. On behalf of the Transportation Advisory Group, receive all correspondence, write all letters and communiques, and carry out duties typically performed by a secretary

13.2 TAG Sub-Committees

- a) The RMOW will be responsible to provide simple administrative support to the TAG Sub-Committees including:
 - i. Prepare the agenda for each meeting
 - ii. Keep the minutes of all meetings and proceedings. Minutes will list meeting attendees, a general summary of discussions, resolutions of TAG Sub-Committee and next steps
 - iii. Provide each participant with notice of meetings and the agenda for the meeting
 - iv. Provide each participant with a copy of the minutes

Committee Terms of Reference

Authorized by:

Council resolution on February 19, 1996.

Revised by Council resolution on April 21, 2009.

Revised by Council resolution on October 6, 2015.



REPORT | ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 6, 2015
FROM: Infrastructure Services
SUBJECT: TRANSPORTATION ADVISORY GROUP (TAG) UPDATED TERMS OF REFERENCE

REPORT: 15-116
FILE: 546

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Infrastructure Services be endorsed.

RECOMMENDATION

That Council adopt the updated Transportation Advisory Group (TAG) Terms of Reference dated October 6, 2015 attached to Administrative Report No. 15-116 as Appendix C;

That Council direct staff to advertise for applications for the three Citizen-at-Large positions on the TAG to be appointed by Council at the November 3, 2015 Closed meeting of Council;

That Council direct staff to contact the Whistler Chamber of Commerce, Tourism Whistler, Whistler Blackcomb, the Ministry of Transportation and Infrastructure and BC Transit to forward the names of their appointees to the Whistler Transportation Advisory Group by November 2, 2015; and further,

That Council direct the General Manager of Infrastructure Services to organize an inaugural meeting for TAG as soon as can be reasonably arranged.

REFERENCES

Appendix A – Whistler Comprehensive Transportation Strategy – Summary Report, 1999
Appendix B – Transportation Trigger Points Volume 1 – Summary Report, 1999
Appendix C – Transportation Advisory Group (TAG) Updated Terms of Reference

PURPOSE OF REPORT

The purpose of this report is to provide Council with updated Terms of Reference for the Transportation Advisory Group (TAG) and for staff to seek authorization to advertise for the Citizen-at-Large positions for TAG.

DISCUSSION

In the late 1990s the Resort Municipality of Whistler (RMOW) formed the Transportation Advisory Committee (TAG) to address transportation issues in the resort community. TAG was comprised of diverse stakeholders including local residents, municipal councillors, municipal staff, representatives from Whistler-Blackcomb, Tourism Whistler, BC Transit and the Ministry of Transportation and Infrastructure (previously called Ministry of Transportation and Highways). One of TAG's first actions was to develop a vision for the future of Whistler's transportation network, one which emphasized preferred travel modes, using existing infrastructure more

efficiently, and limited additional road capacity. This vision developed into the Whistler Comprehensive Transportation Strategy (WCTS), a 350 page document delivered in two phases with input from the Whistler community and extensive review from TAG over a three year period. Attached as Appendix A, is the brief 30 page Whistler Comprehensive Transportation Strategy Summary Report.

In the WCTS report, it was stated that its implementation would depend on actual growth (development, skier visits, traffic and congestion), funding availability, and municipal staff resources. Accurately measuring growth was critical to its goals. It is also important to note that the WCTS accepted some level of congestion, so traditional transportation trigger points such as reaching a specified demand volume were not applicable. Therefore, one of the first actions in implementing the WCTS was to develop a suite of transportation trigger points and proposed thresholds based on the duration, extent, intensity, and predictability of the congestion experienced in Whistler, for both off-season and peak-season periods. Eleven trigger points were developed to monitor change in travel behaviour within the community. See Appendix B – Transportation Trigger Points Volume 1 – Summary Report.

Since the WCTS and the Trigger Points were adopted in 2000 there have been many changes to Whistler's infrastructure:

- The Sea-to-Sky Highway from Vancouver to Whistler has received 600 million dollars in safety upgrades which included adding passing lanes and increasing speed limits resulting in increased vehicle capacity
- Major commercial redevelopment in Whistler Creek has occurred, including the construction of a parking garage for 1,300 day skier vehicles (covered and free to the user) in addition to the parking stalls required for the two new hotels in the area
- The upgrade of Village Skier Day Lots 1-5 including
 - implementing 700 user pay parking stalls in Lots 1, 2 and 3 closest to the mountain base
 - retaining 1,100 free stalls in lots 4 and 5, an extra 3-5 minute walk from the mountain base
- The addition of two major hotels (the Pan Pacific Village Centre and the Four Seasons) in the Village
- The addition of four new residential neighbourhoods (Spring Creek, Rainbow Estates, Nita Lake Estates, and Cheakamus Crossing) that are primarily resident-restricted housing projects
- The overall expansion and redesign of the local Whistler Transit System
- The addition of the Peak to Peak Gondola
- The hosting of many spring/summer/fall events and festivals leading to record breaking summer visitation numbers.

Finally, over five years that have passed since Whistler hosted the 2010 Olympic and Paralympic Games, the resort community has settled into a new rhythm, making this an ideal time to re-examine the traffic monitoring program and recalibrate the transportation models.

The Transportation Advisory Group has not met since 2012. Staff are recommending that TAG should be reconvened. In preparation for the inaugural meeting of the 2015 TAG, staff have retained their engineering consultants from Parsons (formerly Delcan) to recalibrate Whistler's transportation model with a study area extending from Horseshoe Bay to Pemberton.

Staff have updated the TAG Terms of Reference (attached as Appendix C) and reformatted the document using the Economic Partnership Initiative (EPI) Committee Terms of Reference as a template.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Transportation	<p>Transportation preferences and options are developed, promoted and supported so that inter-community mobility minimizes the negative impacts of traditional modes of travel.</p> <p>Residents, businesses and visitors are increasingly aware of the importance and benefits of preferred transportation choices.</p> <p>The transportation system efficiently meets both the short and long-term needs of all users.</p>	<p>Transportation congestion to, from within Whistler is once again becoming an issue both in the winter and in the summer. Transportation infrastructure and policy affect almost all parts of the resort community. The purpose of reconvening the Transportation Advisory Group, which is a composed of a group of diverse stakeholders, is to review the current issues and advise Council on the assessment of, planning for and implementation of strategic options to resolve transportation-related issues affecting the community from a social, environmental and economic point of view. This will move us towards many of the descriptions of success outline in Whistler 2020.</p>
Partnership	Partners work together to achieve mutual benefit.	
Economic	<p>Effective partnerships with government and tourism organizations support economic health.</p> <p>The Whistler community shares resources and works together to compete in the destination resort market.</p> <p>Whistler is an integral part of the region's economy and works collaboratively with stakeholders.</p>	
Finance	<p>Senior levels of government recognize the value of the resort community and support its success.</p> <p>The long-term consequences of decisions are carefully considered.</p>	
Visitor Experience	Communications, travel and services are accessible, seamless and convenient at all phases of visitors' trips, from prior to departure until after returning home.	
Health and Social	Whistler is accessible and inclusive for community members and visitors with disabilities.	

Resident Affordability	Residents have access to affordable goods and services that meet their needs.	
---------------------------	---	--

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves us away from	Comments
Finance	Whistler lives within its financial means.	There are administration and staff costs associated with committees. However, these are considered minor compared to the benefits gained from a shared vision.

BUDGET CONSIDERATIONS

The administrative cost associated with starting up the Transportation Advisory Group will be covered through existing Infrastructure Services budget.

COMMUNITY ENGAGEMENT AND CONSULTATION

Staff are seeking Council authorization to advertise publically for applications for the three Citizens-at-Large positions. It is proposed that all applications received will be forwarded to Council for consideration at the November 3, 2015 Closed Council meeting. Council will then appoint the three Citizens-at-Large positions as outlined in the TAG Terms of Reference.

SUMMARY

The Transportation Advisory Group (TAG) was first formed in 1996 by the Council of the day to help address transportation issues in the resort community. TAG was comprised of diverse stakeholders including local residents, municipal councillors, municipal staff, representatives from Whistler-Blackcomb, Tourism Whistler, BC Transit and the Ministry of Transportation and Infrastructure (previously called Ministry of Transportation and Highways). TAG has not met since 2012. Staff are seeking Council authorization to update the TAG Terms of Reference and to reconvene the group in 2015.

Respectfully submitted,

Emma DalSanto
 TRANSPORTATION DEMAND MANAGEMENT COORDINATOR
 for
 JOE PAUL, ASCT
 GENERAL MANAGER OF INFRASTRUCTURE SERVICES

WHISTLER COMPREHENSIVE TRANSPORTATION STRATEGY

SUMMARY REPORT

TRANSPORTATION ADVISORY GROUP
RESORT MUNICIPALITY OF WHISTLER

SEPTEMBER 1999

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
270 of 336

TABLE OF CONTENTS

INTRODUCTION	2
KEY ISSUES	3
TAG VISION	4
GOALS & OBJECTIVES	5
THE PLAN	8
MAP	16-17
IMPLEMENTATION OF THE PLAN	22
TABLE A PROGRAM COSTS	26

INTRODUCTION

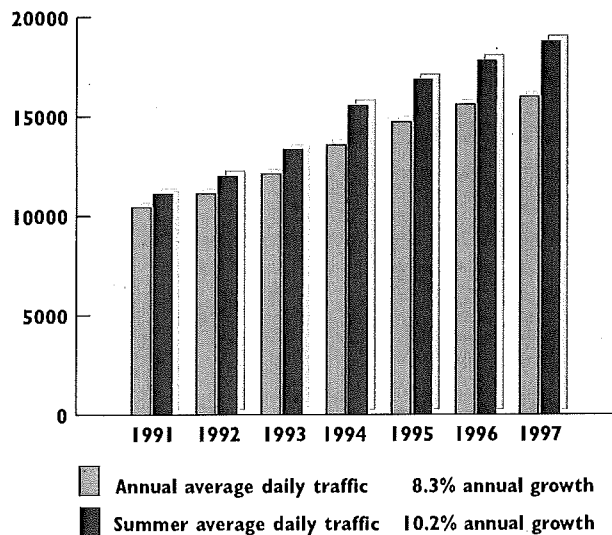
ISSUES FOR THE MILLENNIUM

Whistler has achieved its goal of becoming a world-class, four-season resort. With this achievement, the municipality has also grown and changed. In addition to the new commercial and residential developments attracted to the valley, the most telling evidence of change has been a substantial increase in the demand for travel; in particular, the demand for travel by private automobile. During peak winter weekends, congestion through the Village and on Highway 99 south to Whistler creek has worsened, with delays at times reaching 30 minutes or more. This situation has affected the quality of life for Whistler residents as well as the quality of the resort experience for Whistler's guests. With the increase in summer visits and activities at Whistler, summer daily traffic is now higher than it is in the winter.

ONE OF THE FIRST ACTIONS OF TAG WAS TO DEVELOP A FUTURE VISION FOR TRANSPORTATION IN WHISTLER.

The Transportation Advisory Group, or TAG, was formed in the spring of 1996 to address transportation issues in Whistler. TAG is comprised of many diverse stakeholders, including local residents, councillors, municipal staff, representatives from Whistler-Blackcomb, Tourism Whistler, BC Transit, and the Ministry of Transportation & Highways. One of the first actions of TAG was to develop a future vision for transportation in Whistler, one which emphasized alternative travel modes and limited additional road capacity. TAG then engaged a consultant team to assist them in preparation of a long-range strategic plan which will realize the vision.

HIGHWAY 99 IN WHISTLER:
TRAFFIC GROWTH 1991-1998



KEY ISSUES

THE IDENTIFYING PROCESS

Strategic plans respond to current and future issues facing a community. There were many sources and mechanisms for input to the process of identifying issues. Major stakeholders such as the municipality, IntraWest, Tourism Whistler, BC Transit and the Ministry of Transportation & Highways had input through TAG or through presentations to TAG. The public provided input through representation on TAG, attitudinal surveys, four Town Hall Meetings and two community meetings. The consultant team also identified important transportation issues for Whistler.

More than 100 issues were eventually documented. Then TAG, Council and public input was sought to determine issues which were most important, or the key issues. TAG, Council and the public provided the consultant team with ratings on the level of importance of each issue.

KEY TRANSPORTATION ISSUES FACING WHISTLER TODAY

1. Congestion on Highway 99 and in the Village during peak winter afternoon periods is excessive. Traffic is growing steadily and this is expected to continue with increasing Whistler development. Congestion on Highway 99 and in the Village increases response time for all emergency services.
2. On average, 20 percent of Whistler employees live in Pemberton or Squamish and commute, primarily by car, putting more pressure on Highway 99. This percentage could grow, when the bed cap is reached and market housing becomes even more expensive.
3. Many people perceive public transit as unattractive. Local public transit, therefore, is not being used to the extent it could be.
4. Lack of services and daily needs shopping in Whistler Creek and Alpine Meadows/Emerald force people to drive elsewhere in Whistler for these needs.
5. The one train per day which could service regional trips does not leave or arrive at times convenient for skiers. The passenger rail system is not being fully utilized, with low numbers of regular users.

T A G VISION

QUALITY EXPERIENCE FOR RESIDENTS AND GUESTS

- Be able to move quickly and easily
- Have a safe system
- Retain scenic aspects we now have
- Ensure a high-quality design

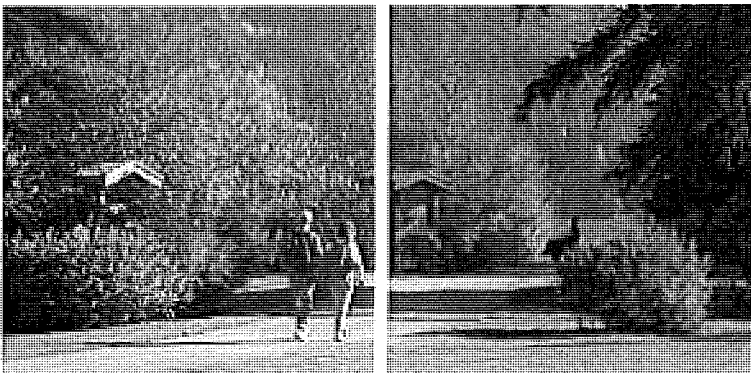
SHORT-TERM PLAN

- Facilitates goods and people moving.
- Is affordable, attractive and practical.
- Allows for future development.
- Utilizes incentives and deterrents to shape desired behavior.
- Recognizes that major stakeholders within Whistler must address transportation concerns.

LONG-TERM PLAN

- Solutions and systems should be flexible.
- Solutions should be physically and financially practical.
- Pro-active versus re-active solutions.
- There should be integration of the Resort and Community.
- Ease of access.
- Should consider growth management.
- Facilitate increased capacities with efficient use of existing systems.
- Growth should not be accommodated simply with linear expansion of existing systems.
- Use creative and unique solutions.
- Ease congestion.
- Integrate transportation and recreation.

20 PERCENT OF EMPLOYEES LIVE IN SQUAMISH AND PEMBERTON AND COMMUTE, PUTTING MORE PRESSURE ON HIGHWAY 99.



GOALS & OBJECTIVES

Six key goals, with their associated objectives, provided the foundation of the Whistler Comprehensive Transportation Strategy. TAG, Council and the public had direct and extensive input to the formation of both the goals and objectives. The goal and objective statements essentially form the policies for transportation in Whistler.

QUALITY OF COMMUNITY AND RESORT EXPERIENCE

GOAL NUMBER 1

Transportation system plans, designs and facilities should be integrated with land use and recreation facility planning to accommodate growth.

TAG wanted to ensure that the Whistler Comprehensive Transportation Strategy was integrated with existing and future land uses and recognized the impacts of additional lifts and new lift bases. It was important that the strategy balanced mountain skier capacity, bed unit capacity, and transportation systems.

OBJECTIVES

- a. Plan land development to shorten travel distances and reduce vehicular travel demand.
- b. Reduce the need for long-distance employee commuting from Squamish and Pemberton.
- c. Reduce the need for daily services shopping by motor vehicle.
- d. Maximize the number of skiers who are able to stay within convenient walking distance or ski-in/ski-out distance from lift staging areas.
- e. Allow easy transfer between lift staging areas to encourage skiers to access the closest lift base and minimize vehicular travel distance.

- f. Plan and design all developments to minimize walking distances to transit, walkways and bicycle facilities and trails.
- g. Plan ski lift staging areas to minimize skier walking distances.
- h. Plan developments to maximize the number of ski-in/out trails.

QUALITY OF COMMUNITY AND RESORT EXPERIENCE

GOAL NUMBER 2

The transportation system should reflect and enhance the natural and urban design features that make Whistler unique.

TAG wanted physical improvements and services associated with Whistler to be different from other communities and in keeping with the resort experience. They did not want off-the-shelf solutions; nor solutions which marred the natural beauty of the valley or the special ambiance created by Whistler's urban designs.

OBJECTIVES

- a. Plan new facilities and improvements to existing facilities to fit visually into the natural landscape.
- b. Encourage designs that are unique to Whistler and its recreational nature.
- c. Maximize retention of existing natural features and new landscaping opportunities in the planning and design of transportation facilities.

MOBILITY AND ACCESSIBILITY

GOAL NUMBER 3

The transportation system should consider and provide for the needs of all user types and contribute to the quality of life within the Whistler resort community.

There are many users of the transportation system: local permanent and seasonal residents, second home owners, guests and non-resident workers. TAG wanted to ensure that all these users are treated equitably. In particular, it was important to provide easy, barrier-free access for those with disabilities.

OBJECTIVES

- a. Impacts on, and benefits to all users of the transportation system should be considered, including seasonal and permanent residents, visitors, non-resident workers, second home owners, commercial delivery and emergency services.
- b. The transportation system should enhance, rather than compromise visitors' experience at the resort.
- c. Minimize visual impact and intrusion of transportation systems.
- d. Provide for easy, barrier-free access.
- e. Transportation facilities and services should be implemented to benefit more than one user, and should not create undue hardship for other users.
- f. Provide for the efficient delivery of goods to activity centres.

MOBILITY AND ACCESSIBILITY

GOAL NUMBER 4

The transportation system should provide efficient, multi-modal access for inter- and intra-municipal travel, as well as inter-regional travel. Attractive alternative modes to the single-occupant vehicle should be provided and encouraged.

While TAG recognized that the automobile will always be a popular mode of travel to and within Whistler and should be provided for, the focus of the Whistler Comprehensive Transportation Strategy is on promoting and providing alternative modes. Complete, continuous and convenient networks for all modes should be provided to encourage people to change their travel choices. Along with these incentives, disincentives for automobile use should be employed to remove the hidden subsidies of automobile travel. A shift of 15 percent of vehicle traffic demand to non-auto modes during peak travel periods was the TAG goal; however, TAG also desired flexibility in the Strategy in case the 15 percent shift was not achieved.

OBJECTIVES

- a. Provide vehicle, transit, bicycle, pedestrian, and other, non-motorized mode networks as part of the transportation system in Whistler linking all developed areas.
- b. Enhance transit routes, frequencies and service.
- c. Increase the convenience of alternative modes and the ease of transfer between different modes.
- d. Improve the regional bus system between Pemberton, Squamish, the Lower Mainland and Whistler to make it more competitive with automobile travel.
- e. Improve the rail link to the Lower Mainland, Pemberton and Squamish to make it more competitive with automobile travel.
- f. The transportation system should provide efficient, multi-modal access for travel by modes other than the private automobile.

GOALS & OBJECTIVES

- g. Support commuting by cycling, walking and other non-motorized modes.
- h. The implications of auto dependence and the need to change travel behaviors should be communicated to the public.
- i. Alternative modes for travel to, from and within Whistler should be promoted and marketed.
- j. Improve the safety of the existing highway to Pemberton, Squamish and the Lower Mainland.
- k. Give physical priority to transit, cycling, walking and other alternative modes over the private automobile.
- l. Give priority to high-occupancy vehicles (HOVs) to make them more attractive with respect to travel time and cost.
- m. In combination with the above incentives, the transportation system should provide disincentives for automobile use, especially single-occupant vehicles, to encourage a change in travel mode choices.
- n. Remove some of the hidden subsidies of travel by private automobile, such as free parking.

COST-EFFECTIVENESS, HEALTH AND SAFETY

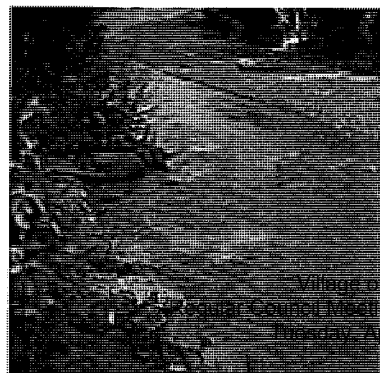
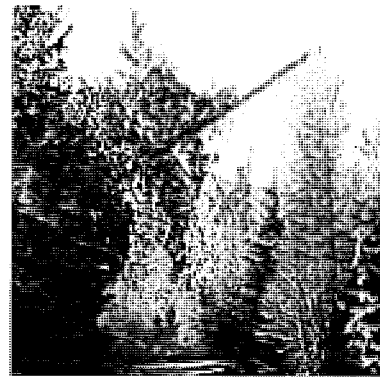
GOAL NUMBER 5

The transportation system should be cost-effective and safe for all users and all modes of travel.

It is important that the Whistler Comprehensive Transportation Strategy is cost-effective for visitors, taxpayers and private industry, by minimizing investment in costly capital projects which expand the road system. Ways of delaying or eliminating the need for costly projects by reducing peak traffic demands are a key component of the Strategy, as is acceptance of peak period congestion. User safety and emergency response are essential in transportation design and operations.

OBJECTIVES

- a. Design and operate transportation systems to maximize user safety.
- b. Reduce barriers to emergency response times within established agency targets.
- c. Design the transportation system to accommodate winter and summer average peak period conditions at reasonable levels of service to users, but accept some periods of congestion during peak seasonal periods.
- e. Shift travel demand away from critically congested links during peak periods.
- f. Shift discretionary travel times to outside the peak period of travel, when most skiers exit the mountain staging areas in order to reduce congestion.
- g. Seek cost-sharing opportunities with senior governments as much as possible.



GOALS & OBJECTIVES

- h. Use new funding sources to support alternative modes.
- i. Use new financing methods for new or improved transportation facilities and programs, including new revenue sources, cost-sharing of transportation improvements with the private sector and user-pay systems.
- j. New sources of funding should not inequitably impact visitors to Whistler.
- k. Specifically target transportation demand management systems to address peak period users.
- e. Design all new transportation facilities to minimize runoff and impact on water quality.
- f. Minimize impact on wildlife habitats.

ENVIRONMENTAL SUSTAINABILITY

GOAL NUMBER 6

The transportation system should be designed to minimize its environmental impact.

Whistler residents value the environment. Transportation systems and facilities can dramatically impact air and water quality. If required, roads and other major facilities should be designed to minimize their impacts on natural or culturally significant areas.

OBJECTIVES

- a. Reduce the amount and hours of travel by transportation modes which create air emissions.
- b. Support innovative technological advances which reduce air emissions.
- c. Minimize the amount of land required for new transportation facilities.
- d. Minimize impact of transportation systems on areas with social, environmental, recreational, historic, archeological or cultural significance.

THE PLAN

THE PLAN IS DESCRIBED UNDER TWELVE MAJOR HEADINGS:

1. Communication and Monitoring
2. Land Use Plans and Policies
3. Whistler Transit
4. Transportation Demand Management
5. Bicycle/Pedestrian Networks & End-of-Trip Facilities
6. Parking Management
7. Whistler Road System
8. Regional Road System
9. Other Regional Improvements
10. Traffic Operations
11. Lift Systems and Mountain Operations
12. Fiscal Impacts

Each of these elements is described in detail on the following pages.



COMMUNICATION & MONITORING

PROMOTE AND ENCOURAGE TRANSIT USE, CARPOOLING, CYCLING, AND WALKING

Develop awareness and education programs designed and targeted for all users of the transportation system, including: residents, home owners, tourists and tour operators, developers and employees, which include incentives for the use of alternative modes. Products of such programs should be:

- Information packages for tour operators, travel agents, and visitors which communicate that:
 - A car is not necessary while in Whistler.
 - Regional bus services are available between Vancouver International Airport, Vancouver, and Whistler.
 - Whistler Village is pedestrian-oriented.
 - Whistler Resort is pedestrian and cyclist-friendly.
 - Cars must be equipped with winter tires during the ski season.
- Promotional campaigns for alternative modes, such as a "Walk/Bike/Carpool to School" or "Bike to Work Week" programs.
- Informational packages for commuter cyclists, including a Bike Map.
- Summer education programs for on-road and off-road cycling skills for children and adults.

REPORT ON THE IMPLEMENTATION AND IMPACTS OF STRATEGY RECOMMENDATIONS

- Establish monitoring variables covering all aspects of the transportation system, such as:
 - Transportation supply (e.g., amount of infrastructure and services provided per capita).
 - Travel demand (e.g., traffic volumes, auto occupancy, transit ridership, mode split to alternative modes, parking demands).
 - Performance (e.g., congestion and delay).
 - Costs capital and maintenance/operating.
 - Develop a regular transportation monitoring program for the municipality and major employers.
- Report monitoring results to Council and to public at annual Town Hall meeting.
- Recognize and reward success:
 - Develop a community award program for employers practicing good Transportation Demand Management policies.
 - Stage an annual Clean Commute challenge.

IMPROVE COMMUNICATIONS AND COORDINATION BETWEEN MAJOR STAKEHOLDERS IN TRANSPORTATION

- Coordinate the long-range transportation plans of Whistler municipality, Intransit, Ministry of Transportation & Highways, BC Transportation Financing Authority, BC Transit, BC Rail, and the Village of Pemberton Squamish-Lillooet Regional District Council Meeting No. 1425 Tuesday, April 19, 2016 280 of 336
- Develop an organizational plan to implement the Strategy.

LAND USE PLANS & POLICIES

MINIMIZE TRAVEL DISTANCES TO WORK FOR WHISTLER EMPLOYEES

- Maximize the amount of employee housing provided within Whistler; service this housing with alternative transportation options (e.g. trail links, transit).
- Locate employee housing as close as possible to centres of major employment.
- Increase density of affordable employee housing close to centres of major employment.

MINIMIZE TRAVEL DISTANCES FOR COMMON DAILY TRIPS

To create shorter vehicle trips, promote walking/cycling and allow residents to avoid congested areas:

- Plan for small neighbourhood centers providing daily shopping needs in closer proximity to residential areas.
- Locate a gas station north of the Village.
- Locate new schools near areas of growing resident population.
- Continue to locate tourist accommodation near or within commercial cores adjacent to ski lifts.
- Encourage the use of Whistler Creek base area by increasing après ski activities, tourist accommodation, restaurants and daily shopping opportunities there.

MINIMIZE IMPACT OF NEW ROADS

- Future roads should not encroach into environmentally sensitive areas of the valley bottom, including Rainbow Park, Emerald Forest, River of Golden Dreams, and the Wildlife Reserve.

- Support alternative modes of travel that conserve natural resources and reduce or delay the need to build new roads.
- Require a noise and visual impact analysis and mitigation as part of the process in all transportation infrastructure design.

PROTECT FUTURE RIGHTS-OF-WAY

Establish alignment and right-of-way corridors for possible future transportation facilities:

- Extensions of the Valley Trail.
- Areas for new rail heads/stations.
- A cabriolet lift system from the Central Village inter-modal centre to the Village lift bases.
- A new lift up Blackcomb Mountain from Day Skier Lot 4.
- The Nita Lake Parkway.
- Widening for up to four lanes on Highway 99 between Lorimer Road and the Nita Lake Parkway.
- The Whistler Bypass on the west side of Alta Lake, from Nita Lake Parkway to 16 Mile Creek.

USE THE DEVELOPMENT PROCESS TO REDUCE FUTURE VEHICLE PARKING REQUIREMENTS AND ENCOURAGE ALTERNATIVE TRAVEL MODES

- Establish average, minimum and maximum parking supply requirements for all land uses, where minimum requirements reflect shared parking with the provision of effective TDM programs, and maximum requirements reflect the parking supply required for reserved parking.

- Encourage shared commercial parking operations in the Village area and discourage reserved parking.
- Encourage new commercial developments in the Village to provide a balance of both daily needs and consumer retail establishments so that individual parking lots are not over-used.
- Require all new and encourage existing developments to provide bicycle storage, showers and change-rooms, ski and clothing lockers for summer bicycle commuters and winter transit users.

SUPPORT REGIONAL GROWTH MANAGEMENT

Encourage a moratorium on corridor development in Squamish, Whistler, and Pemberton, outside of existing official community plans, until a Regional Growth Management Strategy is completed.

WHISTLER TRANSIT

IMPROVE AND EXPAND TRANSIT

- Expand hours and increase frequency for morning and evening transit service on peak days.
- Increase the frequency of transit service to the residential subdivisions.
- Provide an Emerald Estates to Whistler Village and Whistler Village to Function Junction express service on Highway 99, with no stops in the subdivisions.
- Expand and increase the frequency of the existing free Village Shuttle bus service during the winter to cover the major day skier lots and all major destination points in the Village area.
- Eventually, pending development of an alternative funding source, provide free transit service throughout Whistler.

CREATE NEW TRANSIT SERVICES

- Expand free bus service outside of the Village area to include a frequent Village-to-Whistler Creek express bus, providing an alternate funding source is secured.
- Implement a lift system to better service those in Village North and day skier lots outside convenient walking distance to the Village lifts and other Village amenities.
- Expand transit service to include Black Tusk and Pinecrest subdivisions.

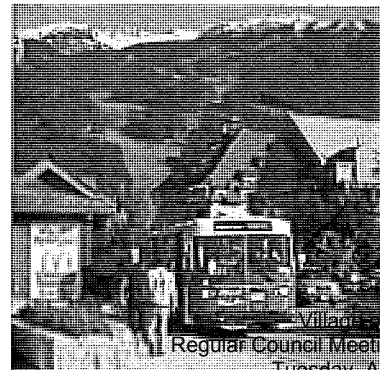
IMPROVE VEHICLES TO MAKE TRANSIT MORE ATTRACTIVE

- Provide local transit vehicles with the capacity to carry bicycles in the spring, summer and fall months.

- Provide local transit vehicles that permit better accessibility for the disabled
- Consider use of innovative transit vehicle types and sizes, including those which use alternative fuels.
- Create better connections between local transit and other modes.
- Develop an inter-modal transportation center within the central Village area, providing connections between local and regional transit, private transit, taxis and pedestrian/cyclist links.
- Provide high-quality bus shelters with transit maps and other amenities at all existing and future high-volume transit stops, with emphasis on key Village and Whistler Creek stops.
- Improve local transit connections from the train station to the lift bases and the future inter-modal transportation center.

REDUCE THE NEED TO CARRY LARGE ITEMS ON TRANSIT SYSTEM

- Create shared facilities in the Village and Whistler Creek, providing lockers and change rooms for employees who commute to store clothing and equipment.
- Provide low-cost, secure, short- and long-term locker rentals near the lift bases so regular visitors and residents can conveniently store their clothing and ski equipment.



TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to a variety of policies, programs and actions that collectively help to reduce the number of vehicles using the road system by providing individuals with viable transportation alternatives, accompanied by various incentives to use these alternatives. This is accomplished by introducing programs and policies designed to influence the mode of travel, the time of travel, and the need to travel by automobile. The success of the Whistler Comprehensive Transportation Strategy is highly dependent on the application of various TDM measures. The TAG goal is a 15 percent reduction in automobiles in peak hours (with the reduction being based on projected growth in traffic volumes as if no TDM measures were in place).

FOCUS TDM PROGRAMS ON PEAK TRAVEL PERIODS

- Accept the transitory congestion periods on Highway 99 and adjust times of travel.
- Manage travel demands on peak skier days with a Peak Day Program that encourages alternative modes, and discourages use of the private automobile by:
 - Providing free transit service.
 - Implementing pay parking strategies.
- Explore modification of mountain operating hours on peak days to spread out traffic peaks along with more flexible ticketing options.

DEVELOP LOCAL PROGRAMS, FACILITIES AND SERVICES TO SUPPORT USE OF ALTERNATIVE TRAVEL MODES

Establish and promote an Employer Trip Reduction program to encourage Whistler employees to take transit, carpool, or bike/walk to work. Consider such items as:

- Free/subsidized bus passes for employees.
- A range of options for combination transit/lift products, such as an optional combined lift ticket/transit pass during mountain operating hours to encourage skiers/boarders to use transit.
- Preferential parking for carpools.
- Pay parking for employees.
- Reduced or free parking for carpools.
- A travel bucks program, whereby employees collect points for using alternative modes which they can use to collect prizes.
- Encourage major employers to purchase more fleet vehicles to increase carpooling services.

DEVELOP REGIONAL PROGRAMS, FACILITIES AND SERVICES TO SUPPORT CARPOOLING

- Organize a rideshare program for Whistler day visitors.
- Identify existing parking lots in the Lower Mainland which can be utilized as park-and-ride lots for those visiting Whistler.
- Provide a van/shuttle service from Vancouver to Squamish, Pemberton and Whistler.
- Implement a region-wide carpool program for employees between Squamish, Pemberton and Whistler.
- Establish employee park-and-ride lots for Whistler employees living in Pemberton and Squamish, and for Whistler residents working in Pemberton and Squamish.

BICYCLE/PEDESTRIAN NETWORKS

PROVIDE AN EXTENSIVE, OFF-ROAD, MULTI-PURPOSE TRAIL SYSTEM FOCUSED ON RECREATIONAL CYCLISTS

- Continue to expand and improve the Valley Trail system.
- Improve the linkage between the Valley Trail and the Village pedestrian walkways.
- Review the Valley Trail standards to provide minimum/desirable widths, horizontal and vertical curvature guidelines, painting and signing requirements.

PROVIDE AN ON-STREET BICYCLE ROUTE SYSTEM FOCUSED ON COMMUTER CYCLISTS

- Create an on-street bicycle route on Highway 99 and establish a more frequent and regular shoulder maintenance program in the spring, summer and fall months.
- Establish operational procedures to provide joint use of Valley Trail system in the winter months for pedestrians and cross country skiers.
- Establish design standards for on-street biking and modify existing road standards to include bicycle facilities, signage and paint markings.

IMPROVE PEDESTRIAN AND CYCLIST SAFETY AND SECURITY

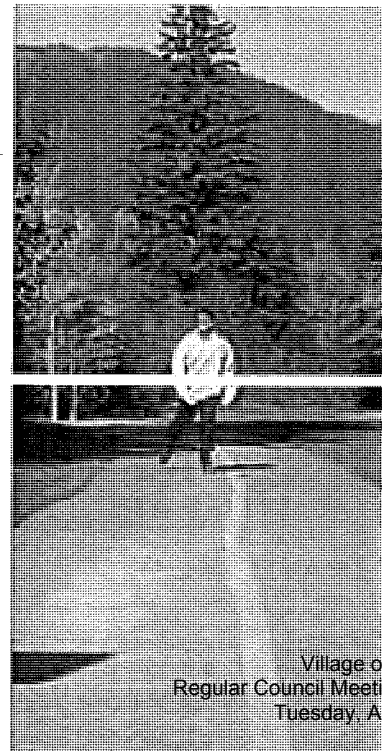
- Provide additional lighting on the Valley Trail System.
- Widen the Valley Trail to allow better compatibility between users in areas demonstrating high speeds or substandard design.
- Consider additional pedestrian under/overpasses on Highway 99.

IMPROVE PEDESTRIAN AND CYCLIST ACCESSIBILITY AND LINKS TO OTHER MODES

- Provide pedestrian and cyclist access through new and existing subdivisions, allowing direct routes to transit.
- Implement a barrier-free access program.

PROVIDE END-OF-TRIP FACILITIES FOR COMMUTER CYCLIST TRIPS

- Develop a secure, shared use facility for employees of small businesses in the Village area for bicycle commuters, with showers, long term bicycle storage, and change-rooms.
- Adopt bylaws and standards for provision of end-of-trip facilities in new developments.



PARKING

MANAGEMENT

MANAGE VILLAGE AREA PARKING MORE EFFECTIVELY

- Limit the total area provided for skier parking in the Village and Benchlands to existing levels, so there is no net gain in parking capacity, except through more efficient parking operations.
- Expand pay parking in Whistler to encourage use of alternative travel modes.
- Encourage employers to charge their employees for parking privileges and to provide incentives for use of alternative modes.
- Stop employees from parking in prime skier lot locations during winter peak season.
- Charge for parking in the day skier lots; provide lower cost/free stalls in the lots further away from the lifts and higher cost stalls close to the lifts.
- Charge for parking in the Conference Centre underground lot.
- Encourage pay parking by non-patrons in the Marketplace lot; allow free parking for store patrons with validated passes.
- Increase attractiveness of Village North parking for central Village employees and patrons, because the central Village has an under-supply of parking.

LOCATE NEW SKIER LOTS SOUTH OF THE VILLAGE

- Increase skier parking supply at Whistler Creek to approximately 1,500 stalls.
- Investigate potential for a new southern satellite parking lot on Crown Lands near Function Junction for day skier and employee park-and-ride; provide free and frequent shuttle bus service to Whistler Creek and Village bases from new southern lot.
- Consider construction of new skier lot with future Whistler South staging area.

R O A D S Y S T E M S

WHISTLER ROAD SYSTEMS

Develop an internal street system, where practical, to remove neighbourhood traffic from Highway 99.

- Continue to develop a collector road system which serves to relieve Highway 99 and supports improved transit and emergency response services.
- Continue to develop a local road system where practical, which provides road connections between neighbourhoods for local traffic, cyclists, pedestrians, transit and emergency vehicles.
- Discourage through traffic on local streets by:
 - Improving Highway 99.
 - Implementing traffic calming measures which retain neighbourhood accessibility.

REGIONAL ROAD SYSTEM

Improve safety and maintain existing capacity of Highway 99 between the Lower Mainland and Whistler.

- Construct additional passing lanes on Highway 99 between Whistler and Vancouver.
- Improve horizontal and vertical geometry on Highway 99 at accident-prone locations.
- Maintain two-lane carrying capacity on Highway 99 through intersections between the North Shore and Whistler.

Increase highway capacity if other actions to reduce travel demand during peak periods have been implemented, and congestion still remains at unacceptable levels.

- Establish trigger points for consideration of Highway 99 capacity improvements within Whistler.

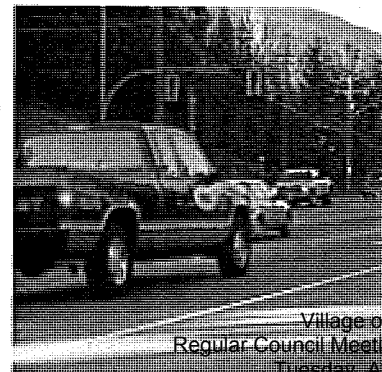
- Monitor congestion and delay on Highway 99 to determine when trigger points are reached.

Reduce congestion and improve safety on Highway 99 in Whistler during peak demand periods.

- Consider a southbound transit/HOV lane between the Village and Whistler Creek.
- To improve safety on Highway 99, consider an off-highway location for informal ride-sharing.

Plan for bypass routes to Highway 99 in Whistler.

- Consider possible construction of the Nita Lake Parkway bypassing Highway 99 on the west side, from just south of Function Junction to Nita Lake when trigger points are exceeded.
- Consider possible construction of an extra northbound lane on Highway 99 between the Nita Lake Parkway and Lorimer Road.
- In the very long term, consider construction of a full west side bypass of Whistler, connecting from the Nita Lake Parkway at Nita Lake to Sixteen Mile Creek, possibly integrated with Harrison/Mount Currie alternative route to Highway 99.



TRAFFIC OPERATIONS

REDUCE CONGESTION IN WHISTLER BY IMPROVING TRAFFIC OPERATIONS

On peak skier days during congested periods, manage traffic more efficiently:

- Improve communication between RMOW and Whistler/Blackcomb regarding days of peak skier demands so traffic control personnel can respond sooner and better.
- Control traffic better on Highway 99 to minimize delay to exiting southbound traffic.
- Consider conversion of Village Gate Boulevard, Blackcomb Way and/or Lorimer Road to one-way operation in order to reduce congestion in the Village area.
- Select timing and phasing plans for the existing traffic signals in Whistler to account for the unique peak period and seasonal demands encountered at the resort. Co-ordinate signals.
- Install new traffic signals only when warranted.
- Use flashing signals late at night in off-peak traffic hours to eliminate unnecessary delays on municipal roads.
- Consider application of modern roundabouts to minimize delays at key intersections within the municipality.

IMPROVE TRANSPORTATION SYSTEM OPERATION THROUGH BETTER COMMUNICATION WITH USERS

- Improve directional signage for roads, transit and trails.
- Implement Intelligent Transportation Systems (ITS) to better manage and control peak period traffic and parking demands, including changeable message signs to advise drivers of parking lot use.

IMPROVE EMERGENCY RESPONSE TIMES DURING PEAK TRAFFIC

- Allow emergency vehicles to utilize the transit/HOV southbound lane on Highway 99 between the Village and Whistler creek to respond faster to emergencies.
- Install fire pre-emption signals at egress points to fire station and medical clinic.
- Retro-fit signals with sound activation, in order to switch signal indication to four-way red when emergency vehicles sounds sirens.

REDUCE SPEED OF TRAFFIC IN RESIDENTIAL AREAS TO IMPROVE LIVABILITY

- Install traffic calming measures in residential areas experiencing problems with speeding, which are safe and effective in both winter and summer conditions.
- Consider emergency vehicles in traffic calming schemes and new road designs; balance practicality vs. aesthetics.

REDUCE THE IMPACT OF TRUCKS IN THE VILLAGE

- Improve existing loading/unloading areas and operations to minimize negative impacts of deliveries.
- Consider changes to the distribution of commercial goods within the Village, such as:
 - Restricted delivery hours
 - Central goods distribution center

OTHER REGIONAL IMPROVEMENTS

MAKE REGIONAL TRANSIT SERVICES MORE ATTRACTIVE

- Encourage transit providers to provide affordable family rates to travel from the airport by bus to Whistler.
- Lobby the provincial government, Vancouver International Airport, and the Motor Carrier Commission to remove monopolies on the regional bus operators.
- Provide bike racks on the transit vehicles coming from Vancouver, Squamish and Pemberton.

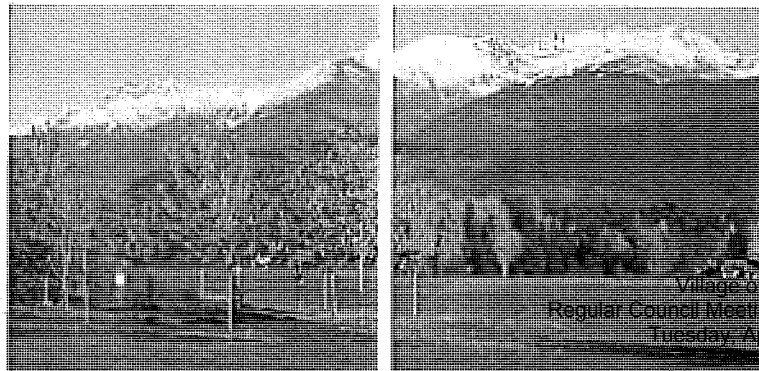
IMPROVE AIR CONNECTIONS TO WHISTLER

- Upgrade the Pemberton airport to allow larger planes with direct connections to Vancouver International Airport and Seattle, with shuttle service to Whistler.

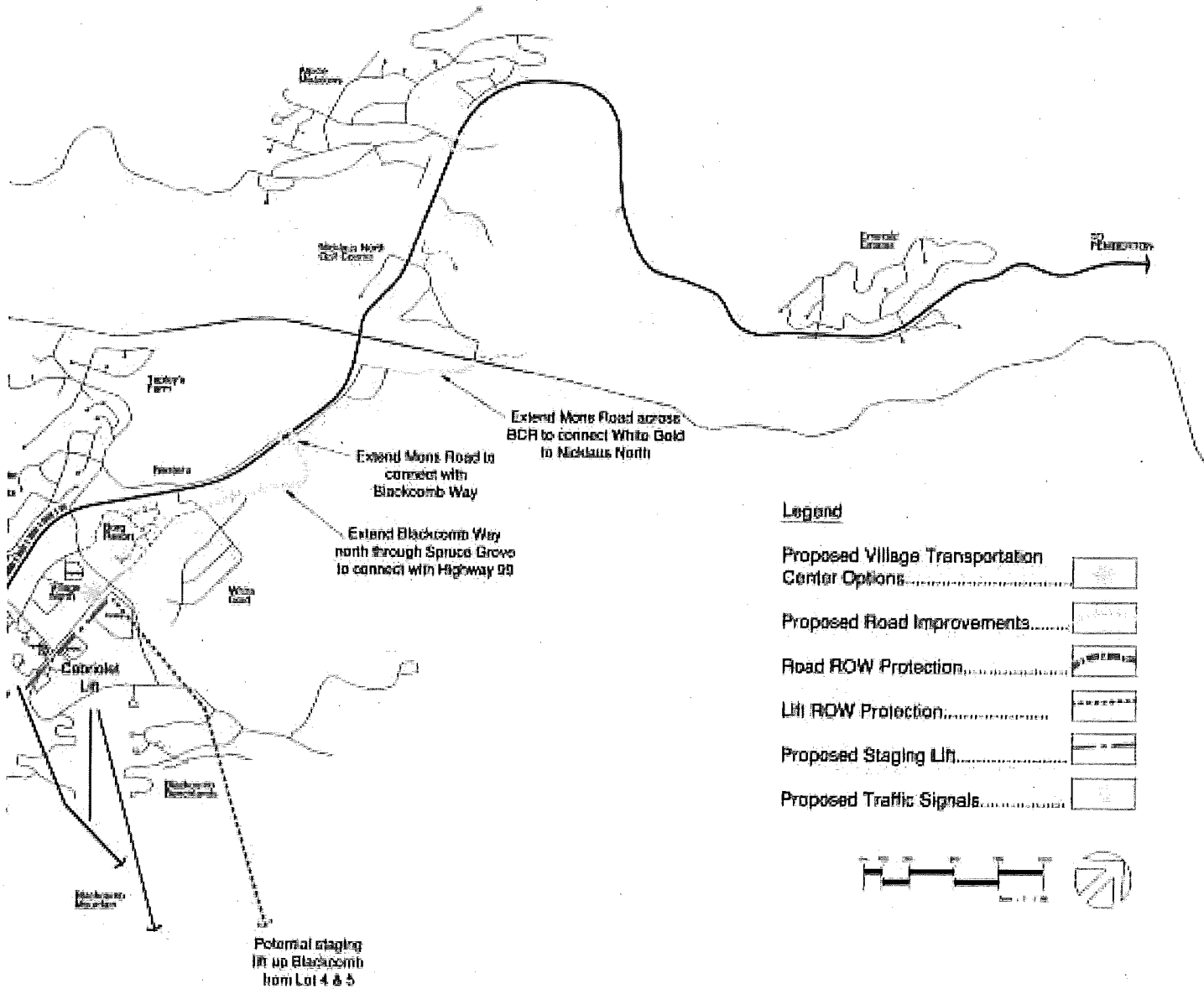
MAKE THE USE OF RAIL MORE ATTRACTIVE

Increase the convenience of rail:

- Improve the frequency and schedule of the existing train service to Whistler.
- Provide a convenient shuttle bus between the Whistler Creek base and the existing train station.
- Locate a new rail station in a location which is attractive to skiers and allows convenient connections to other travel modes.
- In the long term, upgrade the rail line from the Lower Mainland to Pemberton to allow fast passenger trains.



TRANSPORTATION STRATEGY



Legend

- Proposed Village Transportation Center Options.....
- Proposed Road Improvements.....
- Road ROW Protection.....
- Lift ROW Protection.....
- Proposed Staging Lift.....
- Proposed Traffic Signals.....



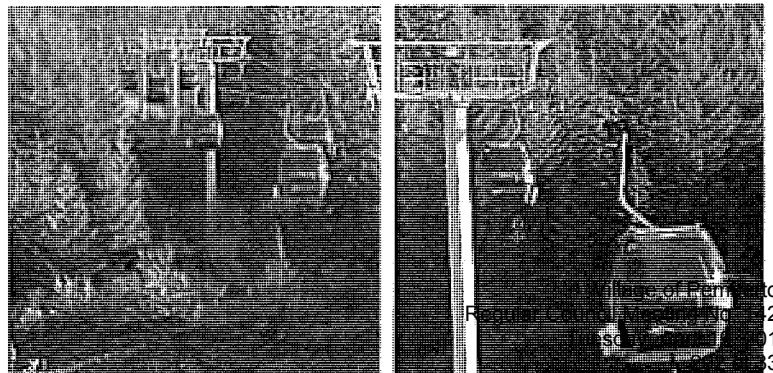
COMPREHENSIVE TRANSPORTATION STRATEGY • SUMMARY REPORT

LIFT SYSTEMS & MOUNTAIN OPERATIONS

PLAN AND IMPLEMENT NEW LIFT SYSTEMS TO MINIMIZE TRAVEL DISTANCES AND REDUCE CONGESTION IN THE VALLEY

- Install a new lift in the Village area to Whistler Mountain.
- Consider installation of a second access lift from Whistler creek to Whistler west side skiing.
- Consider installation of a new lift up Blackcomb Mountain from day skier lot 4.
- Consider development of the Whistler South base with lift systems to Whistler Mountain, as a possible alternative to other road improvements.

MINIMIZE MUNICIPAL AND PROVINCIAL TAXPAYERS' SHARE OF TRANSPORTATION COSTS BY ADOPTING USER PAY PRINCIPLES.



FISCAL IMPACTS

ENSURE TRANSPORTATION IMPROVEMENTS ARE AFFORDABLE

- Implement the transportation plan in phases to minimize costs to the community.
- Minimize municipal and provincial taxpayers share of transportation costs by adopting user pay principles and use revenues generated to support alternative modes of travel.
- Investigate and optimize use of capital cost-sharing programs.

CREATE FUNDING PARTNERSHIPS

- Develop cost-sharing agreements with the MoTH/Transportation Finance Authority for implementing improvements on Highway 99 and bypass routes.
- Explore public/private partnership opportunities such as:
 - construction of the transportation centre as a public/private venture
 - subsidization of local transit by private sponsors
- Develop cost-sharing agreements with stakeholders to implement:
 - pay parking in day skier and Marketplace lots
 - new lifts
 - employee housing
 - new transit services
 - TDM programs
- Develop employer-funded TDM programs in cooperation with other major employers.

IMPLEMENTATION

Implementation of the Whistler Comprehensive Transportation Strategy will depend on actual growth, funding availability and municipal staff resources. However, some plans, policies or physical improvements have higher priorities, or have already been committed. Since the focus of the strategy is to reduce automobile travel so that additional road capacity is not necessary, Transportation Demand Management programs and enhancements to transit and non-motorized modes should occur first. Costly road expansion projects should be deferred until the effect of the TDM measures is fully realized and systems for alternative modes are developed.

The success of the Whistler Comprehensive Transportation Strategy rests on the ability of TDM measures and alternative enhancements to significantly reduce travel demand by automobiles; TAG goal is a 15 percent reduction in automobiles in peak hours (with the reduction being based on projected growth in traffic volumes as if no TDM measures were in place). However, for the Whistler Comprehensive Transportation Strategy to maintain flexibility and be a prudent long-range plan, potential road expansion options have been identified for the longer term. In the strategy, the implementation of road improvements will not occur until specific trigger points are met and all TDM measures have been exhausted.

The Whistler Comprehensive Transportation Strategy indicates an acceptance of some congestion, so traditional trigger points, such as reaching a specified demand volume, are not applicable. To establish appropriate trigger points for Whistler, the nature of the congestion in Whistler must be fully understood, and measured. One of the first actions in implementing the strategy is the development of trigger points based on the duration, extent, intensity and predictability of the congestion experienced in Whistler, for both off-season and peak-season time periods.

TRIGGER POINTS

In the spring of 1999, the Municipality contracted a traffic consultant to assist in the development of transportation trigger points. The consultant's reports: Transportation Trigger Points, Volume 1 – Summary Report, and Volume 2 – Technical Background (August 1999) are an integral component of TAG study. Eleven trigger points have been developed to monitor change in travel behavior within the community are summarized below.

- If the surveyed winter Saturday afternoon peak hour weighted vehicle occupancy rate on Highway 99 between Whistler Village and Whistler creek decreases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to reverse the negative trend and to reach the goal of 2.5 persons per vehicle over 10 years.

Results of past vehicle occupancy studies conducted on Highway 99 reflect a positive trend. The surveyed occupancy rates have been increasing since 1989, and in 1998 the surveyed averaged 2.1 persons per vehicle. The long-range goal is 2.5 persons per vehicle by 2009.

- If the number of total skier visits is forecasted to exceed 20,000 for a given day, then the appropriate temporary TDM measures should be implemented to address the increase in demand.

A correlation between traffic volume and daily skier visits has determined that when 20,000 skier visits (depending on the number of day skiers) are reached on both Blackcomb and Whistler, significant motorist delay may occur on Highway 99. The 1997-98 ski season experienced only one of the 143 ski days with more than 20,000 skier visits. In the 1998-99 ski season, 17 of the 141 ski days had more than 20,000 skier visits. When a 20,000 total skier day is reached, the appropriate temporary TDM measures should be implemented to address the increase in demand.

IMPLEMENTATION

TDM and traffic control measures should be implemented to minimize the duration of congestion on Highway 99.

- If the number of day skier visits exceeds 6,000 per day more than 10 times in one season, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to address the increase in the overall demand.

Day skier visits are considered a more critical indication of traffic congestion on Highway 99 because day skiers tend to arrive and depart within a similar timeframe, and have the same destination (i.e. Vancouver). When day skier ticket sales exceed 6,000, congestion on Highway 99 can be expected. Day tickets sales data provided by Whistler-Blackcomb, indicate that the number of days exceeding 6,000 day tickets decreased from seven in 1997-98 to two in 1998-99.

- If the estimated travel time on Highway 99 from Village Gate Boulevard to Lake Placid Road is equal to or exceeds nine minutes at least 30 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to reverse the negative trend.

When the travel time from Village Gate Boulevard to Lake Placid Road equals or exceeds nine minutes (equivalent to 30 km/hr) at least 30 hours in one year, additional TDM programs should be implemented to reverse this negative trend. In 1997, this threshold was exceeded 29 times, but decreased to 12 times in 1998.

- If the observed travel time from Base II to Function Junction is equal to or exceeds 30 minutes at least 10 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy

should be considered to reverse the negative trend.

At this time, only limited data has been collected; as additional travel time data becomes available, the threshold may change.

- If the observed travel time between Base II and Alpine Way is equal to or exceeds twenty minutes at least 10 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to reverse the negative trend.

At this time, only limited data has been collected; as additional travel time data becomes available, the threshold may change.

THE FOCUS OF THE STRATEGY IS TO REDUCE AUTOMOBILE TRAVEL SO THAT ADDITIONAL ROAD CAPACITY IS NOT NECESSARY.

- If the number of congestion events on Highway 99 lasting longer than two hours in duration occurs 35 or more times a year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.

Congestion is defined as capacity of the roadway. In this instance, Highway 99 congestion is defined as 1,300 vehicles per hour for a period of time greater than two hours at the MoTH permanent count station. When congestion lasting two hours or more occurs 35 or more times a year, then additional TDM measures should be implemented to reverse the trend. In 1996, congestion occurred 37 times; in 1998 and 1999, 30 and 27 events occurred, respectively.

- If the 30th highest hour of volume for a year exceeds 935 southbound (at the MoTH permanent count station) vehicles and this volume expressed as a percentage of the average annual daily traffic is less than 12 per-

cent, then the appropriate implementation program(s) from the Whistler Transportation strategy should be considered to reverse the negative trend.

The permanent count station located on Highway 99 near the Petro Canada gas station provides year-round vehicular count data. Using a combination of manual traffic count information and the data provided by the permanent count station, two relationships have been developed to trigger additional TDM. The first component of the trigger point is the traffic volume threshold, based upon the 30th highest hour of volume, which has been

established as 985 vehicles per hour (equivalent to a

IN A 1997 SURVEY, 60 PERCENT OF SKIERS INTERVIEWED WERE AUTOMOBILE DRIVERS OR PASSENGERS.

level of service D, or an average speed of 27 km/hr on Highway 99). The second component is the K ratio, which is a measure of the traffic volume threshold divided by the average annual daily traffic. When this ratio falls below 12 percent, Highway 99 is exhibiting urban conditions. Historical data from 1996 through 1998 indicates that the summer of 1997 was the only time that both of these components were breached. Annually and in the winter seasons, only one of the components was breached.

- If the overall level of service (LOS) of an intersection is D or worse for the intersection peak hours, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to bring the level of service back up to C or better.

The LOS for intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption and lost travel time. LOS range from A (excellent) to F (failing). The operational performance of intersections has been monitored since 1994, and currently all intersections are operating at a level of service of C or better.

- If the percentage of skiers who use the automobile (driver or passenger) increases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to reverse the negative trend and reach the goal of 45 percent.

In 1997, surveys undertaken by TAG indicated that automobile users (drivers or passengers) constituted 60 percent of the skiers interviewed. TAG has set a goal to reduce automobile use by 15 percent from 1997 levels.

The long-term goal is to reduce automobile use by 15 percent in the next 10 years through implementation of TDM, the communications program, and improvements to the transit system.

- If the surveyed winter Saturday weighted vehicle occupancy rate at the driveway accesses to Lots 1 through 4 decreases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to reverse the negative trend and to reach the goal of 2.5 persons per vehicle over 10 years.

In winter 1996, an occupancy survey of the Village parking lots found an average vehicle occupancy rate of 1.74 persons per vehicle. The 1997 survey found an average vehicle occupancy of 2.46 persons per vehicle. Though the results indicate an improvement, they cannot be measured at par. The municipality has undertaken the first summer Village lot occupancy survey to determine the travel patterns of the summer visitor. A winter survey will provide a comparison to the 1996 results. The long-term goal is to reach a vehicle occupancy of 2.5 person per vehicle over the next 10 years.

PROGRAM COMPONENTS & ESTIMATED COSTS

The following pages provide a summary of the plans, programs or physical/service improvements recommended for implementation. The cost estimates should only be considered as order of magnitude at this time. Programs and policies that are part of the strategy without a cost component have not been included in the table.

It must be recognized that the cost items and estimates included in this implementation program are meant to provide a direction and incentive to move forward. Many details and adjustments will be required along the way. Actual implementation could be later or sooner than indicated, depending on actual growth of the municipality, changing priorities, and success of the TDM measures implemented.

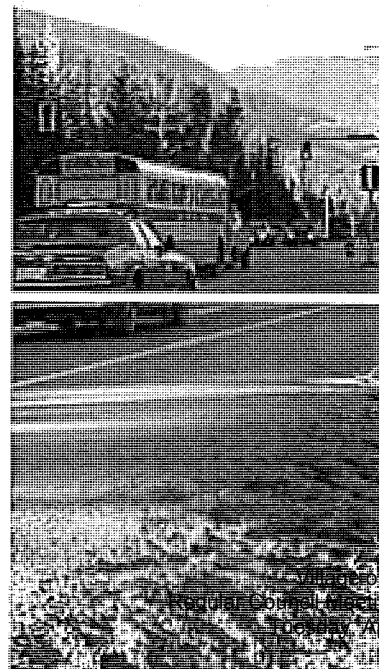
Some components included in the table may prove to be impractical, or may not be necessary (such as seven new traffic signals). The implementation program will be re-visited annually to monitor completed and outstanding items and to respond to changing conditions in the municipality.

Table A lists all the identified cost items (in 1999 dollars) and provides an estimated cost and description for each. The level of effort envisioned by the Strategy for the year 1999 through 2011 is indicated by the costs shown:

Total Annual Cost Component	\$3,403,000
Total Capital Cost Component	\$45,125,000

Annual costs will increase from \$250,000 in 1999 to \$3.4 million by 2011, and these costs are expected to continue beyond 2011. Capital costs over \$1 million will be amortized over 20 years and will continue beyond the year 2011 until paid.

Costs and funding arrangements for Whistler stakeholders and other stakeholders, such as the Transportation Finance Authority, BC Transit and BC Rail, will be an important element of the strategy implementation. The development of cost estimates is now complete and the cost implications are defined. Discussions among all stakeholders shall commence regarding funding options and partnerships.



Whistler Comprehensive Transportation Strategy Summary of Implementation Program Cost Items
Table A - Cost Item Description

COST ITEM	START YEAR	Annual Program Cost	Capital Project Cost	DESCRIPTION
Communications and monitoring				
Promote and encourage transit use, carpooling, cycling, and walking	1999	\$150,000		Develop awareness and education programs designed and targeted for all users of the transportation system, including: residents, home owners, tourists, tour operators, developers, and employers.
Monitoring Transportation System	1999	\$50,000		Establish monitoring variables covering all aspects of the transportation system, such as transportation supply, travel demand, performance, and costs.
Transportation Demand Management				
Develop a plan for regional/local carpooling program	2000		\$80,000	Free/ subsidized bus passes for employees, and preferential parking for carpools.
Implement a local carpooling program	2001	\$100,000		Pay parking for employees, and reduced or free parking for carpools.
Implement a region-wide carpooling program	2001	\$160,000		Pay parking for employees, and reduced or free parking for carpools.
Organize rideshare program for visitors	2002	\$50,000		Organize a rideshare program for Whistler day visitors. Identify existing parking lots in the Lower Mainland which can be used for park and ride lots.
Establish park and ride lots	2003		\$75,000	Establish park and ride lots in Squamish, Pemberton, and Whistler.
Provide regional van/shuttle service for visitors	2004	\$10,000		Provide a van/shuttle service from Vancouver to Squamish, Pemberton, and Whistler.
Establish employee park and ride lots	2004	\$1,000		Establish employee park and ride lots for Whistler employees living in Squamish and Pemberton.
Maintain park and ride lots	2004	\$5,000		Annual costs for maintaining the park and ride lots
Transit				
Village of Whistler Creek Shuttle	1999			Provide bus service from the Village to Whistler Creek (included in the expansion plans of the transit fleet).
Village of Pemberton Buses and Bus Painting	1999		\$25,000	Custom colors for Whistler buses for a distinctive transit system (already included in the AOA with Transit), and bike racks for all buses in the summer (one-time cost for all buses).

**Whistler Comprehensive Transportation Strategy Summary of Implementation Program Cost Items
Table A - Cost Item Description**

COST ITEM	START YEAR	Annual Program Cost	Capital Project Cost	DESCRIPTION
Expand transit service 16 buses to 19 buses	2000	\$219,000		Continue to expand the transit system to accommodate the community, as per the BC Transit AOA.
Expand transit service 19 buses to 23 buses	2001			Continue to expand the transit system to accommodate the community, as per the BC Transit AOA. Note: the increased cost of the expanded fleet is expected to be offset by revenues.
Village Transportation Center Construction	2001		\$1,040,000	Planning, engineering, and construction of a transportation center which will provide a central distribution of passengers and guests to taxis, lifts, hotel shuttles, storage lockers, and local transit.
Village Transportation Center annual subsidy	2002	\$30,000		Additional expenses for the VTC including maintenance.
Annual operating cost for BCR Shuttle	2002			Provide BCR train station service to Village (included in the expansion plans of the transit fleet).
Expand transit service 23 buses to 25 buses	2002	\$136,000		Continue to expand the transit system to accommodate the community, as per the BC Transit AOA.
Provide Emerald to Village to Function Junction Service	2002			Provide an express shuttle from Emerald to Function Junction with limited stops off the Highway (included in the expansion plans of the transit fleet).
Expand transit service 25 buses to 31 buses	2003	\$232,000		Continue to expand the transit system to accommodate the community, as per the BC Transit AOA.
Free service on 30 peak days	2003	\$440,000		Provide free bus service on the 30 peak days of the year.
Construct Cabriolet lift	2005		\$3,200,000	Construct cabriolet lift from Lot 4 to Village base area.
Cabriolet lift subsidy	2005	\$200,000		Maintenance of new lift.
Expand transit service 31 buses to 38 buses (AOA)	2007	\$336,000		Continue to expand the transit system to accommodate the community, as per the BC Transit AOA.
Expand transit service 38 buses to 49 buses (TAG)	2011	\$427,000		Continue to expand the transit system to accommodate the community, as per TAG.
Increased cost of bus shelter maintenance	2000	\$5,000		Increased maintenance cost of expanding bus shelters throughout the valley. Cost to increase as fleet size grows.
Increased cost of bus shelter maintenance	2005	\$13,000		
Increased cost of bus shelter maintenance	2011	\$9,000		

Whistler Comprehensive Transportation Strategy Summary of Implementation Program Cost Items
Table A - Cost Item Description

COST ITEM	START YEAR	COST		DESCRIPTION
		Annual Program	Capital Project	
Bicycle and Pedestrian Network				
Expand Valley trail system	2000	\$200,000		Continue to expand the Valley trail system, develop standards for trail widths, vertical and horizontal curves, painting and signage.
Barrier free access program study	2000		\$25,000	Consultant study to determine this long-term program for the barrier-free access program.
Implement barrier-free access program	2000	\$20,000		Provide pedestrian and bicycle access in the Village and through new and existing subdivisions, allowing direct routes to transit.
Provide more lighting on the Valley Trail	2001	\$130,000		Provide additional lighting on the Valley Trail.
Plan & construct end-of-trip facilities for commuter cyclist	2002		\$200,000	Develop a secure, shared use facility for employees of small businesses in the Village for bicycle commuters, with showers, long-term storage, and change rooms.
Plan/construct a highway/street bicycle route for commuter cyclist	2003		\$75,000	Create a new on-street bicycle route on Highway 99.
Maintain end-of-trip facilities for commuter cyclist	2003	\$60,000		Maintenance of new end-of-trip facilities.
Maintain the highway/street bicycle route for commuter cyclist	2004	\$30,000		Street sweeping, signage and road markings for the on road cycling route.
Widen the valley trail to provide better compatibility between users	2004	\$50,000		Widen the Valley trail in areas which are subject to high speeds or substandard design.
Improve pedestrian and cyclist accessibility and links to other modes	2004	\$100,000		Improve accessibility from walking, biking to other modes of travel.
Parking Management				
Establish parking supply requirements	2004		\$75,000	Establish average, minimum, and maximum parking supply requirements for all land use types; where minimum rates reflect shared parking with the provision of effective TDM programs, and maximum rates reflect the parking supply required for reserve parking operations.
construct southern satellite parking	2008		\$1,000,000	Construction of satellite parking area.
Local Roads				
construct a continuous off-highway road network	2002		\$200,000	Connect neighbourhoods with local roads other than highway 99, such as Millars Pond with Springs Creek, White Gold with Spruce Grove.

Whistler Comprehensive Transportation Strategy Summary of Implementation Program Cost Items
Table A - Cost Item Description

COST ITEM	START YEAR	Annual Program	COST Capital Project	DESCRIPTION
Regional Roads				
Operating cost for shoulder lane	2002	\$150,000		Operating costs for the shoulder lane including staffing, barricades, estimated to be used 30 times a year.
Design 4-lane Highway 99-Nita Lake to Lorimer Road	2003		\$200,000	Design four-lane roadway from Village Gate Boulevard to Function Junction, construct second southbound lane initially, and second northbound lane in future.
Construct permanent second southbound lane, VGB to Nita Lake	2005		\$9,900,000	First phase of road improvements, the second southbound lane will be constructed from VGB to Nita Lake Parkway.
Construction of Nita Lake Parkway	2007		\$23,000,000	Planning, engineering, and construction of the Nita Lake Parkway.
Construct permanent second northbound lane, VGB to Nita Lake	2008		\$3,500,000	Second phase of improvements to Highway 99 is the construction of the second northbound lane from VGB to Nita Lake Parkway.
Traffic Operations				
Peak Day Traffic Management	1999	\$50,000		Improve communications between Mountain and RMOW to respond sooner and better to traffic problems. Manually control traffic signals to minimize delays to exiting southbound traffic.
Study and develop program to reduce speed of traffic in residential areas to increase livability	1999		\$75,000	Develop a traffic calming program and standards to improve the livability in residential areas.
Reduce the impact of trucks in the Village	2000		\$25,000	Improve existing unloading/loading areas and operations to minimize negative impacts of deliveries.
Study and implement changes to the distribution of commercial goods	2000		\$50,000	Restrict delivery hours, central goods distribution center.
Improve directional signage for roads, transit, and trails	2000	\$5,000		Install directional signage for roads, transit routes, and trails.
Residential traffic calming program	2000	\$20,000		Install traffic calming measures in residential areas experiencing problems with speeding, which are safe and effective in both winter and summer conditions.
Reduce congestion by improving traffic operations	2000		\$50,000	Use flashing signals late at night, in off-peak hours to eliminate unnecessary delays.
Regular Council fire pre-emption signals	2001		\$30,000	Install fire pre-emption signals at egress points to fire station and medical clinic.
Roundabout planning study	2002		\$50,000	Study the application of modern roundabouts to minimize delays at key intersections on Highway 99.

Whistler Comprehensive Transportation Strategy Summary of Implementation Program Cost Items
Table A - Cost Item Description

COST ITEM	START YEAR	Annual Program Cost	Capital Project Cost	DESCRIPTION
Implement ITS including changeable message signs	2004		\$1,600,000	Implement Intelligent Transportation Systems to better manage and control peak period traffic and parking demands, including changeable message signs to advise drivers of parking lot utilization.
Maintenance of the Intelligent Transportation Systems	2004	\$15,000		Maintenance of the ITS.
New traffic signals	2011		\$650,000	Install traffic signal when warranted.
Total Annual Cost Component		\$3,403,000		
Total Capital Cost Component			\$45,125,000	

ACKNOWLEDGEMENTS

The Resort Municipality of Whistler wishes to thank the Transportation Advisory Group for their valuable input in the preparation of the Whistler Comprehensive Transportation Strategy.

Bill Murray, Whistler Connection

Nancy Wilhelm-Morden, Councillor

Arthur DeJong, Doug Forseth, Whistler/Blackcomb

Barrett Fisher, Tourism Whistler

Timothy Wake, Whistler Chamber of Commerce

Jordon Sturdy, Member-at-Large

Ross Walker, Delcan Corporation

Maria Szalay, Ministry of Transportation and Highways

Graeme Masterton, BC Transit

And Municipal Staff

TRANSPORTATION TRIGGER POINTS

WHISTLER COMPREHENSIVE
TRANSPORTATION STRATEGY

Prepared for:

**TRANSPORTATION
ADVISORY GROUP**

Volume 1: Summary Report

NAME	THRESHOLD		YEAR					
			1996	1997	1998	1999		
VEHICLE OCCUPANCY RATE	Persons/vehicle	< 2.07		2.03		2.07		
TOTAL SKIER VISITS FOR BOTH MOUNTAINS	# of days with total daily skiers	> 20,000		1	17			
DAY SKIER VISITS FOR BOTH MOUNTAINS	# of days where skiers exceed 6,000	> 10		7	2			
TRAVEL TIME (AUTOMATIC)	Average Hourly Travel time	> 9 min. for 30 hours of the year	45	29	12			
DURATION OF CONGESTION	# of congestion events	>=35	36	30	27			
			NB	SB	NB	SB	NB	SB
TRAFFIC VOLUME	HV30 (vph)	>935	916	1131	982	1099	945	1046
	K ₃₀ (%)	<12	11.9	14.7	12.1	14	12.5	14.4
INTERSECTION PERFORMANCE	# of intersections with	LOS "D" or worse	1		1			0

Prepared for:

CTS CREATIVE
TRANSPORTATION
SOLUTIONS LTD.
Transportation Engineering &
Planning Consultants

August 1999

Village of Pemberton
Regular Council Meeting No. 1425
Tuesday, April 19, 2016
304 of 336

TRANSPORTATION TRIGGER POINTS

WHISTLER COMPREHENSIVE TRANSPORTATION STRATEGY

Volume 1: Summary Report

Prepared for:

**TRANSPORTATION ADVISORY GROUP
c/o RESORT MUNICIPALITY OF WHISTLER**

4325 Blackcomb Way
Whistler, B.C.
V0N 1B4

(604) 932-5535

Prepared by:

CREATIVE TRANSPORTATION SOLUTIONS LTD.

2714 Henry Street
Port Moody, B.C.
V3H 2J9

(604) 936-6190

File: 3126-01

25 August 1999



TABLE OF CONTENTS

- 1.0 INTRODUCTION 1**
- 2.0 BACKGROUND..... 2**
 - 2.1 History..... 2
 - 2.2 What is a Trigger Point?..... 3
- 3.0 THE TRIGGER POINTS..... 4**
 - 3.1 TRIGGER POINT #1: Vehicle Occupancy Rate 5
 - 3.2 TRIGGER POINT #2: Total Skier Visits..... 5
 - 3.3 TRIGGER POINT #3: Day Skier Visits 6
 - 3.4 TRIGGER POINT #4: Vehicular Travel Time (Calculated) between Whistler Village and Creekside 6
 - 3.5 TRIGGER POINT #5: Vehicular Travel Time (Measured) between Base II and Function Junction 7
 - 3.6 TRIGGER POINT #6: Vehicular Travel Time (Measured) between Base II and Alpine Meadows 7
 - 3.7 TRIGGER POINT #7: Duration of Congestion..... 7
 - 3.8 TRIGGER POINT #8: Vehicular Traffic Volumes..... 8
 - 3.9 TRIGGER POINT #9: Intersection Performance..... 8
 - 3.10 TRIGGER POINT #10: Modal Shift..... 9
 - 3.11 TRIGGER POINT #11: Vehicle Occupancy Rate at Village Lots..... 9
- 5.0 CONCLUSIONS & RECOMMENDATIONS..... 11**
 - 5.1 Study Conclusions 11
 - 5.2 Study Recommendations 12

1.0 INTRODUCTION

Creative Transportation Solutions Ltd. (CTS) was retained by the Resort Municipality of Whistler (RMOW) on 15 February 1999 to assist in the development of transportation trigger points. The purpose of the trigger points is to identify when the implementation programs for the *Whistler Comprehensive Transportation Strategy*, as stated in the summary report by the Transportation Advisory Group (TAG) of RMOW are warranted. The primary objectives of this study were:

- ✓ To research current theories and applications of congestion measurement methods;
- ✓ To develop trigger points which examine a broader range of determinants than conventional vehicular traffic;
- ✓ To develop trigger points that are technically valid and reflect the resort nature of Whistler;
- ✓ To use the trigger points to indicate when implementation and augmentation of transportation demand management (TDM) measures are warranted to reverse a negative trend in travel behavior in Whistler Valley;
- ✓ To use the trigger points to indicate when capital transportation improvements may be required after TDM measures have first been attempted; and
- ✓ To document the findings and recommended trigger points for implementation.

The final report consists of the following two volumes:

VOLUME 1 Summary Report

VOLUME 2 Technical Background

Volume 1 summarizes the proposed trigger points and their current status. Volume 2 provides a more detailed perspective of the methodologies used to develop the proposed trigger points.

2.0 BACKGROUND

2.1 History

Traffic congestion has become a major transportation system concern in the Resort Municipality of Whistler (RMOW). On peak ski days, travel times of up to 45 minutes to travel from the ski parking lots in Whistler Village to Function Junction (a distance of only 8.2 kilometres) have been observed. The continuing growth of both the municipality as a resort and the record breaking skier visits only exacerbate the problem.

The congestion problem has been examined and reported in great detail with several recent documents including *the Whistler Comprehensive Transportation Strategy – Phase 2 Report* and the *Summary Report* by TAG. The establishment of transportation trigger points was one of many components advocated by the initiative. This integral action is the first step to the implementation of the plan. The following possible Highway 99 and municipal roadway improvement objectives have been included in the transportation strategy endorsed by the TAG:

- 1) Implement transportation demand management (TDM) principles such as high occupancy vehicle (HOV) lanes, "Park & Ride" programs and premium pricing for parking and lift tickets in related policies, programs and actions;
- 2) Promote multi-modal travel by expanding Whistler Transit fleet size and route system;
- 3) Widen the existing shoulder lane of Highway 99 to accommodate a southbound transit/ carpool lane between Whistler Village and Creekside;



- 4) Protection of a right of way for the Nita Lake Parkway on the west side of the valley;
- 5) Construction of an extra northbound lane on Highway 99 between Nita Lake Parkway and Lorimer Road;
- 6) For the long term, secure right-of-way for the potential construction of the Highway 99 Whistler bypass on the west side of the valley;
- 7) Extend Blackcomb Way north through Spruce Grove to connect with Highway 99; and
- 8) Extend Mons Road across the B.C. Rail line to connect White Gold with Nicklaus North.

2.2 What is a Trigger Point?

Trigger points are used as thresholds to indicate when a condition reaches an unacceptable level. When a trigger point has been met, a series of events may unfold. For example, implementation of one of the transportation demand management, transit, parking supply and/ or road system related programs in TAG's summary report might be considered. If the condition is not mitigated by the improvement action(s), then capital alternatives may be explored. It is recognized that the proposed transportation trigger points address transportation-related programs which represent only a portion of the Whistler Comprehensive Transportation Strategy.

The determination of feasible trigger points that can be easily monitored by RMOW is a technical and quantitative process. However, the selection of a specific threshold value is generally qualitative in nature and should be made by the community and/or their representatives. These threshold values should reflect the policies of RMOW on what is an acceptable level of traffic congestion for the community.

3.0 THE TRIGGER POINTS

The descriptions, thresholds and current status of each of the proposed transportation trigger points for Whistler are summarized in TABLE 3.0:

TABLE 3.0: PROPOSED TRANSPORTATION TRIGGER POINTS

TRIGGER #	NAME	DESCRIPTION OF FACTORS	THRESHOLD		YEAR									
					1996		1997		1998		1999		2000	
1	VEHICLE OCCUPANCY RATE	Average number of persons per vehicle observed during winter count program, positive trend (GOAL=2.5)	Persons/vehicle	< 2.07	[shaded]		2.03		[shaded]		2.07		[shaded]	
2	TOTAL SKIER VISITS FOR BOTH MOUNTAINS	20,000 daily total skier visits forecasted for Blackcomb and Whistler Mtns.	# of days with total daily skiers	> 20,000	[shaded]		1		17		[shaded]		[shaded]	
3	DAY SKIER VISITS FOR BOTH MOUNTAINS	# of days in a season with 6,000 day skier visits recorded for Blackcomb and Whistler Mtns.	# of days where skiers exceed 6,000	> 10	[shaded]		7		2		[shaded]		[shaded]	
4	TRAVEL TIME (AUTOMATIC)	LOS D travel time between Village Gate Blvd. & Lake Placid Rd. on Hwy. 99 (Free flow= 4 min.)	Average Hourly Travel time	> 9 min. for 30 hours of the year	45		29		12		[shaded]		[shaded]	
5	TRAVEL TIME (MANUAL)	Travel time between Base II & Funckon Junction (Free flow= 11 min.)	Average Hourly Travel time	> 30 min. for 10 hours of the year	TENTATIVELY PROPOSED									
6	TRAVEL TIME (MANUAL)	Travel time between Base II & Alpine Way (Free flow= 6 min.)	Average Hourly Travel time	> 20 min. for 10 hours of the year										
7	DURATION OF CONGESTION	# of congestion events (where at least 835 vph are observed for 2 or more consecutive	# of congestion events	>=35	36		30		27		[shaded]		[shaded]	
8	TRAFFIC VOLUME	30th highest hourly volume for the year (HV30) and K ₉₀ observed at perm. count stn.	HV30 (vph)	>935	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
					916	1131	982	1099	945	1046	[shaded]	[shaded]	[shaded]	[shaded]
			K ₉₀ (%)	<12	11.9	14.7	12.1	14	12.5	14.4	[shaded]	[shaded]	[shaded]	[shaded]
9	INTERSECTION PERFORMANCE	LOS rating of each individual signal	# of intersections with	LOS "D" or worse	1		1		[shaded]		0		[shaded]	
10	SKIER MODAL SHIFT	Percentage split between auto-users and non auto-users as surveyed at both mountains, positive trend (GOAL=45%)	% of auto-users	> 60%	[shaded]		60%		[shaded]		[shaded]		[shaded]	
11	VEHICLE OCCUPANCY RATE (at Village lots)	Average number of persons per vehicle observed during winter count program, positive trend (GOAL=2.5)	Persons/vehicle	< 2.46	1.74		2.46		[shaded]		[shaded]		[shaded]	

N.B.: shaded area indicates that data was unavailable at the time of assessment.



3.1 TRIGGER POINT #1: Vehicle Occupancy Rate

If the surveyed winter Saturday afternoon peak hour weighted vehicle occupancy rate on Highway 99 between Whistler Village and Creekside decreases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend and to reach the goal of 2.5 persons per vehicle over 10 years.

The results from past vehicle occupancy studies conducted on Highway 99 in Whistler reflect a positive increasing trend (2.1 persons per vehicle in 1999). A long-term (10 years) target was discussed with RMOW and a vehicle occupancy rate of 2.50 is recommended for RMOW. The surveyed vehicle occupancy rates have been increasing since 1989. Currently, trigger point #1 is not being met.

3.2 TRIGGER POINT #2: Total Skier Visits

If the number of total skier visits is forecasted to exceed 20,000 for a given day, then the appropriate temporary TDM measures should be implemented in order to address the increase in demand.

A review of both Highway 99 traffic data and daily mountain skier data determined that 20,000 skier visits was a threshold for when significant motorist delays may began to occur in Whistler Valley, depending on the level of day skier activity (see Trigger Point #3). The 1997/ 1998 ski season experienced only 1 (or 0%) of the 143 ski days with a skier visit total of 20,000 or more. In the 1998/ 1999 ski season, the number of days increased to 17 (or 12%) of the 141 ski days. Because a 20,000+ total skier visit day does not necessarily indicate a potential for an at-capacity situation along Highway 99, it is recommended that temporary measures first be considered.



3.3 TRIGGER POINT #3: Day Skier Visits

If the number of "day skier" visits exceeds 6,000 per day more than 10 times in one season, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to address the increase in overall demand.

"Day skier" visits are considered a more critical indication of traffic congestion on Highway 99 than total skier visits because "day skiers" tend to arrive and depart in their automobiles within a similar timeframe. They also tend to have similar origins and destinations (i.e. Vancouver). Based on "day skier" data, the number of estimated days that the southbound capacity on Highway 99 was reached has decreased from 7 days during the 1997/ 98 ski season to 2 days during the 1998/ 99 ski season (-71%). The 1998/ 99 ski season was the busier of the two seasons on the mountains, but that was not reflected by the vehicular traffic in Whistler Valley. Currently, trigger point #3 is not being met.

3.4 TRIGGER POINT #4: Vehicular Travel Time (Calculated) between Whistler Village and Creekside

If the estimated travel time on Highway 99 from Village Gate Blvd. to Lake Placid Road is equal to or exceeds 9 minutes at least 30 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.

The number of times the travel time threshold of 9 minutes was exceeded dropped from 29 times in 1997 to 12 times in 1998. Currently, trigger point #4 is not being met.



**3.5 TRIGGER POINT #5: Vehicular Travel Time (Measured)
between Base II and Function Junction**

If the observed travel time from Base II to Function Junction is equal to or exceeds 30 minutes at least 10 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.

The thresholds for trigger point #5 are tentative pending availability of more actual travel time data. The trigger point currently proposed is based on a limited amount of manually collected data and engineering judgement.

**3.6 TRIGGER POINT #6: Vehicular Travel Time (Measured)
between Base II and Alpine Meadows**

If the observed travel time from Base II to Alpine Way is equal to or exceeds 20 minutes at least 10 hours in one year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.

The thresholds for trigger point #6 are tentative pending availability of more actual travel time data. The trigger point currently proposed is based on a limited amount of manually collected data and engineering judgement.

3.7 TRIGGER POINT #7: Duration of Congestion

If the number of congestion events on Highway 99 lasting longer than 2 hours in duration occurs 35 or more times in a year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.



Both the overall number of events (from 30 to 27) and number of hours (from 89 to 71) of congestion are down in 1998 from 1997 respectively. Currently, trigger point #7 is not being met.

3.8 TRIGGER POINT #8: Vehicular Traffic Volumes

If the 30th highest hour of volume (HV30) for a year exceeds 935 southbound (@ MoTH permanent count station) vehicles AND this volume expressed as a percentage of the average annual daily traffic (AADT) is less than 12%, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend.

The volume criterion of the threshold should be breached with relative ease in comparison with the K criterion. The analysis has revealed that no capacity improvements are currently warranted.

YEAR	CRIT-ERIA	THRES-HOLD	SUMMER ONLY		WINTER ONLY		ENTIRE YEAR	
			North bound	South bound	North bound	South bound	North bound	South bound
1998	HV30 (vph)	>935 vph	905	890	819	992	945	1046
	K (%)	<12%	10.6	11.6	11.1	13.2	12.5	14.4

Note: shaded area indicates a breach of proposed threshold.

However, as the hourly traffic volumes become more consistent (graphically, less *spiking*), the K value will drop. Currently, trigger point #8 is not being met.

3.9 TRIGGER POINT #9: Intersection Performance

If the overall level of service of an intersection is "D" or worse for the intersection peak hours, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered to bring the level of service back up to "C" or better.





Currently, all intersections are operating at a level of service C or better. However, the following intersections have a 1999 level of service of C and may require improvements in the future:

1. Highway 99 & Village Gate Boulevard
2. Highway 99 & Lake Placid Road
3. Highway 99 & Function Junction (signalized Summer 1999)

3.10 TRIGGER POINT #10: Modal Shift

If the surveyed percentage of automobile users (driver or passenger) increases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend and to reach the goal of 45%.

In 1997, surveys were undertaken for TAG, which determined that the automobile users (ie. driver or passenger) constituted 60% of the skiers interviewed. TAG has set a goal to reduce the automobile users percentage by 15%, however no target year had been defined. From trigger #1, it was agreed that a long-term goal could ideally be achieved in 10 years. The current status (for 1999) of trigger point #10 is not yet known.

3.11 TRIGGER POINT #11: Vehicle Occupancy Rate at Village Lots

If the surveyed winter Saturday weighted vehicle occupancy rate at the driveway accesses to Lots 1 through 4 decreases from the previous year, then the appropriate implementation program(s) from the Whistler Transportation Strategy should be considered in order to reverse the negative trend and to reach the goal of 2.5 persons per vehicle over 10 years.



A weighted average vehicle occupancy rate of 1.74 persons per vehicle was found at the village lots during a count survey conducted during the winter of 1996 while interviews conducted in the lots during the winter of 1997 derived a rate of 2.46 persons per vehicle.

Although it appears that the rate has improved over the course of one year, the two results cannot be measured at par. The interview survey may yield a bias result depending on the sampling methods and the truthfulness of the answers given. A vehicle occupancy count survey (as a component of a detailed parking lot study) is scheduled for village lots 1 through 4 on 21 August 1999, but it must be recognized that summer and winter traffic behaviour in Whistler are not consistent.

To monitor the trend properly, it is recommended that a winter vehicle occupancy rate be determined through a count survey and compared to the rate found in the 1996. Currently, trigger point #11 is not being met.



5.0 CONCLUSIONS & RECOMMENDATIONS

5.1 Study Conclusions

The major findings of the traffic analysis and development of the trigger points were as follows:

- 1) The winter vehicle occupancy rate on Highway 99 in Whistler has been increasing over the last 10 years reflecting a positive trend in that more people are ridesharing.
- 2) It was determined that 6,000 "day skier visits" in a day generates sufficient southbound traffic on Highway 99 just south of Village Gate Blvd. during the afternoon peak hour to bring the facility to capacity and result in significant queue spillbacks into Whistler Village. The estimated capacity of Highway 99 through Whistler Valley was determined to be 1300 vehicles per hour per lane. The number of days where the "day skier" visits exceeded 6,000 was 7 in the 1997/1998 season and 2 in the 1998/1999 season.
- 3) It was determined that 20,000 total skier visits in a day generates a potential for congestion on the road network, especially within Whistler Village. The number of days where the total skier visits exceeded 20,000 was 1 in the 1997/1998 season and 17 in the 1998/1999 season.
- 4) Road and intersection operational performance are usually described by a level of service, which range from "A" (excellent) to "F" (failing). A level of service "D" was determined to be a suitable standard for all transportation-related thresholds in RMOW. This standard is a compromise between recognizing the resort nature of Whistler and the associated lower tolerance for excessive delay and congestion by



locals and tourists versus the desire by the community not to undertake major road network improvements.

- 5) The Ministry of Transportation & Highways have a permanent count station on Highway 99 just north of the Petro Canada gas station where traffic volumes are counted on an hourly basis by direction throughout the year. The historical data was instrumental in developing mathematical models for Whistler Valley to predict the level of congestion in past years.

5.2 Study Recommendations

This study developed transportation trigger points for Whistler Valley in order to identify when transportation demand management measures and/ or major capital transportation improvements are warranted. The success of the proposed transportation trigger points depends entirely on them being monitored on an annual basis. However, it is recognized that the proposed transportation trigger points may require refining as more data becomes available. Therefore, it is recommended that RMOW:

- 1) Conduct a vehicle occupancy survey at least once every winter on Highway 99 just north of the Petro Canada gas station and that summer surveys be considered;
- 2) Monitor skier visit data from Blackcomb and Whistler Mountain to determine the frequency of 20,000+ skier visit days AND 6,000+ "day skier" days in a season;
- 3) Utilize the Ministry of Transportation & Highways permanent count station data on Highway 99 just north of the Petro Canada gas station to monitor traffic volumes, the duration of congestion and to estimate travel times throughout the year;



- 4) Conduct a travel time survey every Saturday and Sunday for a whole year during the morning and afternoon peak periods (07:00-09:00 & 15:00-18:00) in order to finalize the two travel time trigger point thresholds requiring manual data parameters;
- 5) That RMOW consider setting up their own permanent count stations utilizing existing roadway detector loops at signalized intersections under their control and/ or installing dedicated roadway detector loops to collect only traffic volumes;
- 6) Conduct intersection counts regularly at all locations surveyed during the 1999 Whistler Traffic Monitoring Program;
- 7) Conduct interview and/ or postcard surveys at lift tickets kiosks at both mountains to determine the mode of transportation used by skiers for that season; and
- 8) Conduct a vehicle occupancy survey every summer and winter at Village lots 1, 2, 3, and 4 (includes 4a).

Transportation Advisory Group (TAG)

UPDATED - Terms of Reference

October 6, 2015

1 DEFINITION

1.1 TAG – Transportation Advisory Group

- a) The TAG¹ is comprised of appointed local stakeholder organizations and community representatives – each in a unique position to contribute to the planning of Whistler’s transportation future.
- b) The Group will be advising on transportation matters within Whistler’s boundaries while considering the implications of transportation infrastructure within the Sea to Sky corridor and how it affects Whistler.

2 PURPOSE OF THE TRANSPORTATION ADVISORY GROUP (TAG)

The purpose of the Transportation Advisory Group (TAG) is to identify transportation related issues to, from, and within Whistler, and to then provide Whistler Council with advice and recommendations regarding the assessment of, planning for, and implementation of strategic options to resolve these transportation related issues affecting the Resort Community from a social, environmental and economic point of view.

3 RESPONSIBILITIES

3.1 TAG is responsible for meeting on a regular basis in order to:

- a) Consider municipal policies with respect to transportation planning, facilities, regional services, parking, movement of goods, high occupancy vehicle priority options, guest arrival and in-resort experience, taxis, innovative funding sources and partnership especially for preferred modes of transport to, from and within the Resort, new services such as ride sourcing, etc.
- b) Assist the municipality with the development of policies and programs that reduce the number of vehicles using the road network, enhance transportation demand management (TDM) initiatives and have the added benefit of reducing greenhouse gas (GHG) emission and improving the Resort’s environmental performance.
- c) Monitor, discuss and assess transportation operational issues with a focus on reducing peak time traffic congestion reducing GHG emissions and moving towards Whistler’s environmental targets.

4 GUIDING PRINCIPLES

- a) Transportation system plans, designs and facilities should be integrated with land use and recreation facility planning to accommodate growth.
- b) The transportation system should reflect and enhance the natural and urban design features that make Whistler unique.

¹ Originally established by Council resolution February 1996 for the purposes of developing a Whistler Comprehensive Transportation Strategy which was completed in 1999.

- c) The transportation system should consider all user types and contribute to the quality of life within the Whistler resort community.
- d) The transportation system should provide efficient, multi-modal access for inter- and intra-municipal travel. Attractive alternative modes to the single occupant vehicle should be provided and encouraged.
- e) The transportation system should be cost-effective and safe for all users and all modes of travel.
- f) The transportation system should be designed to minimize its environmental impact.
- g) The Transportation Advisory Group (TAG) will dialogue with the Economic Partnership Initiative (EPI) Committee and/or EPI Working Group to ensure that recommendations from the TAG align with the objectives, goals and actions of EPI report.

5 COMPOSITION OF THE TRANSPORTATION ADVISORY GROUP (TAG)

Participation on the Transportation Advisory Group is as follows:

5.1 TAG Members

- a) Voting
 - i. Two (2) representatives from Whistler Council
 - ii. Resort Municipality of Whistler's Chief Administrative Officer (CAO)
 - iii. One (1) representative from the Whistler Chamber of Commerce
 - iv. One (1) representative from Tourism Whistler
 - v. One (1) representative from Whistler Blackcomb
 - vi. Three (3) Citizens-at-Large
- b) Non-Voting
 - vi. One (1) representative from the Ministry of Transportation and Infrastructure (MoTI)
 - vii. One (1) representative from the BC Transit (BCT)
 - viii. Resort Municipality of Whistler's General Manager of Infrastructure Services
 - ix. Resort Municipality of Whistler's General Manager of Resort Experience
 - x. Resort Municipality of Whistler's Transportation Demand Management Coordinator
- c) The Chair shall be selected by the Group members on an annual basis.
- d) The General Manager of Infrastructure Services is the primary staff liaison for TAG and shall ensure there are adequate resources for meetings and that meeting minutes are properly recorded and submitted to Council.
- e) Changes to the participation in the TAG will need to be approved by RMOW Council.

5.2 Corridor Partners

- a) District of Squamish (DOS)
- b) Lil'Wat Nation
- c) Squamish Lillooet Regional District (SLRD)
- d) Squamish Nation
- e) Village of Pemberton (VOP)

5.3 Other Stakeholders

- a) Local Not-For-Profits
 - i. Association of Whistler Area Residents for the Environment (AWARE)
 - ii. Mature Action Committee (MAC)
 - iii. Whistler Cycling Club
 - iv. WORCA
- b) Private carrier companies (scheduled and non-scheduled providers)
- c) Other Provincial ministries
- d) Measuring Up Select Committee of Council
- e) Royal Canadian Mounted Police (RCMP)
- f) Whistler Transit System operating company

- g) Vancouver Airport Authority (YVR)
- h) Whistler Housing Authority (WHA)
- i) Hotel Association of Whistler (HAW)
- j) Restaurant Association of Whistler
- k) Whistler Fire and Rescue Services
- l) Whistler Ambulance Services
- m) School District 48
- n) Local taxi companies
- o) BC Ferries
- p) TransLink

6 TERM

6.1 Council Members

- a) TAG members representing Council has shall be appointed by the Mayor and will serve a two-year term running concurrently with their election to Council, or until determined otherwise by the Mayor. One Councillor shall be the Whistler appointee to the Squamish Lillooet Regional District (SLRD) Board so as to provide a direct link to regional issues.

6.2 Representatives of External Organizations

- b) External organizations shall appoint their respective TAG representative. There is no minimum or maximum time period for representation from an external organization.

6.3 Citizens-At-Large

- c) Members that have been appointed as a "Citizen-at-Large" will serve a two year term. These members shall reapply to Council at the end of their term if they wish to remain on the TAG. There is no maximum time period for a Citizen-at-Large on the Committee, subject to reappointment by Council.
- d) Any Citizen-at-Large vacancies will be advertised by the Municipality. Council will review the applications and select the required new members. Citizens-at-Large shall be selected based on their qualifications and experience pertaining to the matters which will be addressed by the Group. Also, Council shall consider the applicant's ability to provide knowledgeable and professional advice and recommendations to Council on the matters that will be considered by the Transportation Advisory Group. The candidates shall be selected by Council resolution.

7 SUB-COMMITTEES

- a) The Transportation Advisory Group (TAG) may convene Sub-Committees to deal with specific transportation related issues. The Chair may invite representatives that are not part of the TAG to participate on a Sub-Committee. Sub-Committees report to Council through TAG.

8 MEETING PROCEDURES

8.1 Transportation Advisory Group

- a) The proceedings of the Transportation Advisory Group will be of a working session format and will follow the agreed upon meeting agenda
- b) Corridor Partners and other stakeholders may be invited to participate in a portion, or all of a TAG meeting as determined by the Transportation Advisory Group members.

8.2 TAG Sub-Committee

- a) The proceedings of a TAG Sub-Committee will be of a working session format and will follow the agreed upon meeting agenda
- b) In addition to regular meetings, substantial Sub-Committee activity will be completed independently and shared digitally with other Sub members-Committee members.

9 MEETINGS

Transportation Advisory Group shall meet quarterly or as required by the Chair.

10 QUORUM

- a) Five voting members of TAG shall constitute quorum.
- b) Recommendations of the TAG shall be made by consensus of members in attendance at a meeting, provided a quorum is present at the meeting.
- c) If consensus cannot be reached, a majority opinion will form the recommendation of the Transportation Advisory Group. Dissenting views will be noted and presented alongside the recommendation.

11 CONFLICT OF INTEREST

- a) TAG members, partners and stakeholders are expected to adhere to standard conflict of interest policies.
- b) Council members must adhere to the RMOW's conflict of interest polices consistent with Council Policy A-21.

12 CODE OF CONDUCT

- a) Each participant of the Transportation Advisory Group and any TAG Sub-Committee must at all times fully comply with applicable federal, provincial and municipal laws and should avoid any situation, which could be perceived as improper or unethical.
- b) All participants are expected to be sufficiently familiar with any legislation and bylaws that apply to their position on TAG.
- c) All participants will ensure that the confidentiality of confidential information is maintained.
- d) All participants must not engage in any financial transactions, contracts, or private arrangements for personal profit, which accrue from or are based upon confidential or non-public information, which the member gains by reason of his/her position as a participant on TAG.
- e) Confidential information that members receive through their position on the TAG and/or a TAG Sub-Committee must not be divulged to anyone other than persons who are authorized by Council to receive the information. A member of TAG or a TAG Sub-Committee must not use information that is gained due to his or her position or authority, which is not available to the general public, in order to further the participant's private interest. Participants must not offer such information to spouses, associates, immediate family, friends, or persons with whom the member is connected by frequent or close association.

13 ADMINISTRATIVE DUTIES AND RESPONSIBILITIES

13.1 Transportation Advisory Group

- a) The RMOW will be primarily responsible to provide administrative support to the Transportation Advisory Group including:
 - i. Prepare the agenda for each meeting
 - ii. Keep the minutes of all meetings and proceedings. Minutes will list meeting attendees, a general summary of discussions, resolutions of TAG and next steps
 - iii. Provide each participant with notice of meetings and the agenda for the meeting
 - iv. Provide each participant with a copy of the minutes

- v. On behalf of the Transportation Advisory Group, receive all correspondence, write all letters and communiques, and carry out duties typically performed by a secretary

13.2 TAG Sub-Committees

- a) The RMOW will be responsible to provide simple administrative support to the TAG Sub-Committees including:
 - i. Prepare the agenda for each meeting
 - ii. Keep the minutes of all meetings and proceedings. Minutes will list meeting attendees, a general summary of discussions, resolutions of TAG Sub-Committee and next steps
 - iii. Provide each participant with notice of meetings and the agenda for the meeting
 - iv. Provide each participant with a copy of the minutes

Committee Terms of Reference

Authorized by:

Council resolution on February 19, 1996.

Revised by Council on April 21, 2009.

Revised by Council on [REDACTED],

From the Office of the Medical Health Officer

April 12, 2016

Mayor and Council
Village of Pemberton
PO Box 100
Pemberton, BC V0N 2L0

Via Email: sfraser@pemberton.ca

Re: Lead Testing for Pemberton Residents

RECEIVED
APR 12 2016
VILLAGE OF PEMBERTON

Dear Mayor and Council,

Thank you for your letter of April 7, 2016 emphasizing the need for access to screening and testing for lead for the residents of Pemberton.

It was apparent at the Town Hall meeting on April 5th that residents are very concerned about their potential exposure to lead. Vancouver Coastal Health communicated directly to physicians in the Pemberton and Whistler communities promptly on April 6th and recommended that testing be provided on a case by case basis for residents of Pemberton in their practices (memo attached).

I have also communicated directly to School District Superintendents in the Coastal Rural region (Sea to Sky, Sunshine Coast, Powell River and Bella Bella and Bella Coola) with the recommendation to implement daily flushing of water lines in all schools, as a precautionary measure (letter attached). Historically there has been a similar situation with elevated lead and copper levels in schools in Kitimat. The Northern Health Authority worked with BCCDC to assess the impact of the exposure to children in schools. We have adapted their communication and created a comparison of lead and copper levels found in Kitimat schools and Pemberton schools. We have also attached this document (including appendix "Estimating Lead Intakes from School Drinking Water") for your review.

Thank you for your proactive response to the concerns of the residents in the Village of Pemberton.

Sincerely



Paul Martiquet, M.D.,C.M.,CCFP.,M.H.Sc.,FRCP(C)
Medical Health Officer

Cc: The Honourable Terry Lake, Minister of Health
Jordan Sturdy, MLA
Dr. Patricia Daly, Chief Medical Health Officer & Vice-President, Public Health, VCH

From the Office of the Medical Health Officer

Date: April 6, 2016
To: Physicians – Pemberton
cc: Physicians - Whistler
From: Paul Martiquet, Medical Health Officer
Re: Lead and Drinking Water – Pemberton Update

A public meeting was held on April 5th to address the issue of lead levels found in the drinking water in the Village of Pemberton. It was apparent that levels of anxiety are high among the residents. The overall message was that people want to be reassured that their children's blood lead levels are not affected by lead in the standing water in their plumbing.

I would like family physicians to consider each patient on a case by case basis and if testing is warranted to encourage patients to share their results with the community. **Please communicate any lead results to me as well.** If levels are high we will have to consider other sources of exposure in the home as well as the water.

Once again, please reinforce that the solution to this exposure is to run the taps till cold before drinking the water.

I hope this helps with your continued communication to your patients about this issue. Please contact me if you have any questions or further concerns. I can be reached at 604-886-5600 or via email at paul.martiquet@vch.ca.

From the Office of the Medical Health Officer

April 12, 2016

To: **School District Superintendents**
- **School District 46 Sunshine Coast**
- **School District 47 Powell River**
- **School District 49 Central Coast**

Via Email

Re: Flushing of Water in all Schools

We currently have an issue with higher than acceptable levels of lead in the drinking water in the Village of Pemberton. It has been determined that low PH, alkalinity and hardness of Pemberton's water are interacting with plumbing fittings and fixtures and this has produced elevated levels of lead in drinking water. This is of particular concern in schools that may have lead plumbing, fixtures or brass fittings, or used solder containing lead. Tests were conducted in the mornings after water had been standing overnight. Repeat testing of the sample schools after several minutes of flushing showed no or very low levels of lead. There has been a similar situation with elevated lead and copper levels in schools in Kitimat. Attached is a document that compares the lead and copper levels found in Kitimat schools and Pemberton schools (including appendix "Estimating Lead Intakes from School Drinking Water") for your review.

As School Health Officer, I recommend that School Districts commence daily flushing of all water lines in all of the schools in your districts, even in communities where your water is not acidic (lead can still leach into pipes overnight). Flushing the water lines involves letting the tap (and fountain) water run until it turns cold. Flushing should occur prior to schools opening for the day. This recommendation is a cautionary approach to ensure that lead exposure in schools is reduced to the lowest levels achievable.

For more information about minimizing exposure to lead from drinking water distribution systems please refer to "[Water Talk](#)", a document produced by Health Canada. Also attached are additional resources for your review ("Lead and Copper in Drinking Water" and "Recommendations for Drinking Water Fountains in VCH School Districts").

Please contact me if you have any questions or concerns. I can be reached at 604-886-5600 or email at paul.martiquet@vch.ca.

Sincerely,



Paul Martiquet, M.D.,C.M.,CCFP.,M.H.Sc.,FRCP(C)
Medical Health Officer

Encl.

From the Office of the Medical Health Officer

April 12, 2016

To: Lisa McCullough, School District Superintendent
School District 48 Sea to Sky

Via Email

Re: Flushing of Water in all Schools

We would like to acknowledge the steps the school district has recently taken in response to the elevated levels of lead and copper in school drinking water. Historically there has been a similar situation with elevated lead and copper levels in schools in Kitimat. The Northern Health Authority worked with the BCCDC to assess the impact of the exposure to children in schools. We have adapted their communication and created a comparison of lead and copper levels found in Kitimat schools and Pemberton schools (including appendix "Estimating Lead Intakes from School Drinking Water") for your review.

As School Health Officer, I have recommended that all School Districts in the Coastal Rural region (Sunshine Coast, Powell River, Sea to Sky, Bella Bella and Bella Coola) commence daily flushing of all water lines in all of the schools.

For more information about minimizing exposure to lead from drinking water distribution systems please refer to "Water Talk", a document produced by Health Canada. Also attached are additional resources for your review ("Lead and Copper in Drinking Water" and "Recommendations for Drinking Water Fountains in VCH School Districts").

Please contact me if you have any questions or concerns. I can be reached at 604-886-5600 or email at paul.martiquet@vch.ca.

Sincerely,



Paul Martiquet, M.D.,C.M.,CCFP.,M.H.Sc.,FRCP(C)
Medical Health Officer

Encl.

A Comparison of Lead and Copper Levels

Testing in Kitimat 2012 school water supplies in contrast to historical sampling in Signal Hill Elementary and Pemberton Secondary School

The table below summarizes the results of chemical testing of water in Kitimat schools in 2012. (Note: The table lists only the highest lead and copper results that were found. There were numerous taps and fountains with lower readings not included in this table). For comparative purposes we've also attached data for the Pemberton schools for your reference.

Kitimat Schools	Sample Type	Copper Mg/l	Lead Mg/l
Nechako Elementary School	Pre-flush	7.57	0.141
	Post-flush	7.28	0.0189
Kildala Elementary School	Pre-flush	4.46	0.0286
	Post-flush	0.637	0.00256
Kitimat City high	Pre-flush	4.03	0.191
	Post-flush	7.01	0.0208
Mount Elizabeth Secondary School	Pre-flush	3.77	0.142
	Post-flush	5.17	0.0178
St. Anthony's Elementary School	Pre-flush	6.37	0.00754
	Post-flush	2.52	0.0051
Guidelines for Canadian Drinking Water (MAC for lead and AO for Copper)		1.0	0.010

Pemberton Schools	Sample Type	Copper Mg/l	Lead Mg/l
Signal Hill Elementary School (December 2003)	Pre-flush	5.92	0.002
	1 min flush	0.16	Not det.
Signal Hill Elementary School (April 2010)	Pre-flush	0.324	0.01
	1 min flush	2.32	0.0021
	3 min flush	0.309	0.001
Signal Hill Elementary School (February 2015 Normal daily operation)	11:10 am	0.132	0.00037
Signal Hill Elementary School (March 2016)	Pre-flush	0.707	0.0120
	14 min flush	0.143	0.00083
Pemberton Secondary School (December 2003)	Pre-flush	5.63	0.002
	1 min flush	0.078	Not det.
Pemberton Secondary School (April 2010)	Pre flush	0.839	0.039
	1 min flush	0.263	0.0009
	3 min flush	0.167	0.0007
Pemberton Secondary School (February 2015 Normal daily operation)	11:10 am	0.14200	0.0005
Guidelines for Canadian Drinking Water (MAC for lead and AO for Copper)		1.0	0.010

In both Kitimat and Pemberton, levels were found to be elevated above the Maximum Acceptable Concentration (MAC) for lead, and the Aesthetic Objective (AO) for copper in several schools, most notably in some of the samples taken before the taps were flushed for five minutes or more. BCCDC has calculated that a child drinking water from the worst pre-flush sample in the table could receive up to 50% of her daily acceptable dose of lead according to Health Canada guidelines (Pemberton levels were not as high as Kitimat levels).

Typically children receive about 10% of their lead intake from drinking water. In a worst case scenario where a child drinks water at home containing the same amount of lead as in the worst sample, she might receive up to 70% of her daily allowable limit for lead from drinking water alone leaving relatively little margin for lead exposure from other sources such as food or dirt. (See appended document, Appendix A "Estimating Lead Intakes from School Drinking Water, Environmental Health Services, BCCDC, March 2012)

Copper levels are also significantly elevated in many of the pre-flush and even post-flush samples in both Kitimat and Pemberton schools; however the objectives for these recommended limits are for aesthetics (taste and odor) rather than for health. There is no current MAC for copper.

The reasons for these high levels of lead and copper are twofold:

- A relatively aggressive, acidic community water supply which supports rapid corrosion and leaching of these metals into the water. (The source water for the community itself contains acceptable levels of copper and lead)
- Leaching of copper and lead from older style lead soldered copper plumbing into water standing in the pipes overnight

The Northern Health Authority (NHA) worked with the School District in Kitimat to ensure that measures such as decommissioning the most problematic taps and fountains and ensuring that adequate flushing takes place each day are put in place immediately while they considered longer term solutions. NHA is also in discussion with the City of Kitimat about steps they can take to reduce the aggressiveness of the water supply. This process is also taking place between Vancouver Coastal Health (VCH), School District 48 and the Village of Pemberton.

The consensus with BCCDC is that these exposures in the school alone would be unlikely to be clinically significant but we do not have information on lead exposures in the home. It is probable that they would vary from household to household and from person to person.

The school district for Kitimat communicated with parents about these test results and also planned a news release to provide the community with consistent information including the desirability of flushing water taps at home where lead soldered copper plumbing is in place. This communication is also taking place in School District 48.

In view of this, NHA recommended that physicians may choose to consider blood lead testing in some of their patients depending on their exposure history. This is the recommendation made to Pemberton physicians as well.

Appendix A:

Estimating Lead Intakes from School Drinking Water, Environmental Health Services, BCCDC, March 2012

Credit:

Northern Health Authority - original author of this communication

*Dr. David Bowering, MHO, NW
HSDA*

April 12, 2016

- page 2 -

Estimating lead intakes from school drinking water *Environmental Health Services, BCCDC* *March 2012*

Introduction

Lead is a neurodevelopmental toxicant. Chronic, low level exposures in childhood have been associated with persistent deficits in intelligence and the development of behavioural disorders.¹ No level of exposure to lead is considered safe as evidenced by the occurrence of health effects at even low levels of exposure (i.e. blood lead levels (BLLs) below 10 µg/dL).² Research suggests that the lowest levels of exposure may be associated with the greatest health impacts per unit increment of blood lead.³ A review of seven studies investigating the relationship between childhood lead exposures and intellectual function found that deficits in intelligence followed a log-normal dose response relationship, with the greatest decrease in IQ points occurring in children with the lowest exposures (BLLs between 2.4 -10 µg/dL) compared to children with the highest exposures (BLLs between 20-30 µg/dL).³

Exposure to lead is particularly a concern in younger children, although it is not clear at what age children no longer represent a susceptible population. Young children generally have higher exposure levels compared to older children and adults, and are more susceptible to the effects of lead due to a higher absorption rate into the body and more vulnerable systems.² As a developing nervous system is particularly sensitive to the effects of low level lead, pregnant women also represent a vulnerable group.⁴ Exposure to lead can occur via food, water, air, dust and dirt.

Lead in water

Typically, water is not a significant source of lead, but in cases where lead-containing plumbing combines with water chemistry that promotes leaching (e.g. water with high pH and soft water), it can contribute substantially to total lead intake. According to Health Canada, water accounts for approximately 10% of daily intake of lead for a two-year old children, and 11% for an adult; these estimates are based on an assumed lead concentration of 4.8 µg/L in water.⁵ Food is generally the largest contributor to daily lead intake, accounting for 50% and 82% in children and adults, respectively. For children, leaded dust and dirt are also important contributors to daily lead intakes (38%).⁵

Recently, sampling for lead in drinking water was conducted at two secondary schools (Mount Elizabeth Secondary School, Kitimat City High) and three elementary schools

(Nechako Elementary School, Kildala Elementary School St. Anthony's Elementary School) in Kitimat, BC. Results indicate that water at some school outlets exceeds the Health Canada drinking water guideline of 10 µg/L for pre- and post-flush samples.

To assess the potential lead exposures to students at these schools, estimates of lead intake from water (µg/day) were made using the highest pre- and post-flush concentrations (table 1). Separate calculations were made for elementary versus high schools as children attending these schools differ in age range, and consequently in their water intake rates and body weights.

Table 1. Estimates of lead intakes from school water (µg/day) based on the highest pre- and post-flush samples collected in Kitimat schools (µg/L).

Type of school	Maximum lead concentrations in school water (µg/L)	Water intake (L/day) ^e	Lead intake from water (µg/day)
Secondary	191 (pre-flush) ^a	0.75	143.3
	20.8 (post-flush) ^b		15.6
Elementary	141 (pre-flush) ^c	0.30	42.3
	30.3 (post-flush) ^d		9.09

^aSite: Kitimat City High; Sample number: KCH-DE-Pre

^bSite: Kitimat City High; Sample number: KCH-DE-Post

^cSite: Nechako Elementary School; Sample number: NE-DE#3 – Pre

^dSite: Nechako Elementary School; Sample number: NE-DF#6 – 30 sec

^eBased on the assumption that half of the daily water intake comes from school; daily intake rates for all water of 0.6 L/day for 6 year-old children (used here as an estimate for elementary school aged children) and 1.5 L/day for adults (used here as an estimate for secondary school aged children) were used⁵

The World Health Organization has established a provisional tolerable weekly intake (PTWI) of 25 µg/kg of body weight for lead⁶, which is equivalent to an acceptable daily intake (ADI) of 3.5 µg/kg of body weight.⁵ For an elementary school aged child weighing 33.4 kg⁷, lead intake of 42.3 µg/day from consumption of school drinking water would give a daily lead intake of 1.27 µg/kg. For a secondary school aged child weighing 60.5 kg⁷, lead intake of 143.3 µg/day from consumption of school water would give a daily lead intake of 2.37 µg/kg. Under such scenarios, school drinking water alone would contribute close to half of the ADI and PTWI.

Previous investigations of water quality suggest that the Kitimat municipal water supply may have characteristics which promote leaching of lead from household plumbing. Since water delivered to homes will in all probability have the same water chemistry as that supplied to schools, it is reasonable to assume that children may be exposed to elevated lead levels in household water in addition to exposures from school water. In a worst-case scenario, if all drinking water (i.e. household and school water) had a lead

concentration of 141 µg/L (the pre-flush value collected at an elementary school drinking water outlet) and if the contribution of all other lead exposure pathways (i.e. air, food, dust and dirt) were consistent with those used by Health Canada, water would contribute close to 70% of the "tolerable" daily lead intakes in school aged children (table 2). In the same scenario, water would account for over 70% of daily lead uptake (the amount absorbed into the body).

Table 2. Contribution of air, food, dust and dirt, and water to elementary and secondary aged children if all water (household and school water) had a lead concentration of 141 µg/L*

Medium	Concentration	Elementary school aged child (33.4 kg ⁷)		Secondary school aged child (60.5 kg ⁷)	
		Intake (%)	Uptake (%)	Intake (%)	Uptake (%)
Air	0.06 µg/m ³	0.72 (0.58)	0.29 (0.69)	1.08 (0.41)	0.43 (0.81)
Water	141 µg/L	84.6 (68.3)	29.6 ^a (70.4)	212 (80.0)	42.3 ^a (80.0)
Food	Various	30.1 (24.3)	10.5 (25.0)	48.4 (18.3)	9.68 (18.3)
Dust, dirt	140 µg/g	8.4 (6.78)	1.68 (4.00)	3.50 (1.32)	0.53 (1.00)
Total		123.8	42.1	265.0	53.0

*Adapted from Health Canada⁹. A linear relationship was assumed between lead intake (amount taken into the body) and uptake (amount absorbed by the body) and age for each media. Values were extrapolated from Health Canada information which was based on intake and uptake rates for 2-year old children and adults. Specifically, calculations are based on the following values:

1. Inhalation rate of 12 m³/day and 18 m³/day for elementary and secondary school aged children, respectively.
2. Drinking water consumption of 0.6 L/day and 1.5 L/day for elementary and secondary school aged children, respectively.
3. Intake of lead of 0.9 µg/kg/bw and 0.8 µg/kg/bw for elementary and secondary school aged children, respectively.
4. Ingestion of dirt of 60 mg/day and 25 mg/day for elementary and secondary school aged children, respectively.
5. Absorption of inhaled lead is 40% for elementary and secondary school aged children, respectively.
6. Absorption of lead from food and water of 35% and 20%, for elementary and secondary school aged children, respectively.
6. Absorption of lead from dirt and dust of 20% and 15% for elementary and secondary school aged children, respectively.

Key Points

- Lead is a non-threshold neurotoxicant. Exposure to low levels (BLLs < 10 µg/dL) have been associated with neurodevelopmental effects, including deficits in intelligence and behavioural disorders. Reducing all sources of lead is important as research indicates that the lowest levels of exposure are associated with the greatest per unit health impacts.

- Typically, water contributes approximately 10% and 11% to the daily lead intake in 2-year old children and adults, respectively; the remainder is contributed by lead in food, air, and dust.
- The highest lead water concentrations collected at both a Kitimat secondary school (pre-flush = 191 μ /L; post-flush = 20.8 μ /L) and an elementary school (pre-flush = 141 μ /L; post-flush = 30.3 μ /L) greatly exceed the Health Canada drinking water guideline of 10 μ g/L.
- At these levels, school drinking water alone contributes to close to half of the acceptable daily intake (3.5 μ g/kg) and the provisional tolerable weekly intake (25 μ g/kg) assuming water intake levels of 0.3 L/day and 0.75 L/day for elementary and secondary school aged children, respectively.
- Children may be exposed to elevated lead in household water in addition to exposures through school water due to the aggressiveness of the water supplied by the District of Kitimat.
- In a worst-case scenario, if all water (household and school water) consumed by children had a lead concentration of 141 μ g/L (the pre-flush value collected at an elementary school drinking water outlet), water would contribute close to 70% of the daily "tolerable" lead intake in children.

References

1. Bellinger DC. Very low lead exposures and children's neurodevelopment. *Curr Opin Pediatr*. 2008 Apr;20(2):172.
2. Bellinger DC. Lead. *Pediatrics*. 2004 April 1;113(4):1016.
3. Lanphear BP, Hornung R, Khoury J, Yolton K, Baghurst P, Bellinger DC, et al. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environ Health Perspect*. 2005 Jul;113(7):894-9.
4. Wigle DT, Arbuckle TE, Turner MC, Berube A, Yang Q, Liu S, et al. Epidemiologic evidence of relationships between reproductive and child health outcomes and environmental chemical contaminants. *Journal of Toxicology and Environmental Health Part B, Critical Reviews*. 2008 May;11(5-6):373.
5. Health Canada. Lead1992. Available from: http://www.hc-sc.gc.ca/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/water-eau/lead/lead-plomb-eng.pdf.
6. World Health Organization. Lead in drinking-water. 2011 Contract No.: WHO/SDE/WSH/03.04/09/Rev/1. Available from: http://www.who.int/water_sanitation_health/dwg/chemicals/lead.pdf.
7. Shields M. Overweight and obesity among children and youth. *Health Reports*. 2006;17(3):27-42.