

# What We Heard: Landfill Lateral Expansion

May 18-September 16, 2022

## Project Background

The Squamish Landfill is on-track to reach capacity in late 2028 to early 2029. To ensure residents and businesses continue to have a local disposal option for waste, The District of Squamish is pursuing a lateral expansion of the Landfill to the east of the current Landfill.

The District assessed three options including, lateral expansion of the current landfill, waste-export out of the region, and a waste-to-energy facility. Lateral expansion is the best option for Squamish at this time due to costs, provincial approvals, and timing. The project will incorporate an upgrade to the current transfer station and the installation of a leachate treatment system.

While not anticipated, if it is determined during the process that a lateral expansion is not possible, or a temporary solution is required, the District will move forward with exporting waste to a landfill outside of the Squamish-Lillooet Regional District (SLRD).

To allow for a lateral expansion of the landfill, a focused amendment to the SLRD Solid Waste and Resource Management Plan (SWRMP) is required. This focused amendment must be approved by the provincial Ministry of Environment and Climate Change Strategy (MOECCS). In the interest of time, the District is submitting a focused amendment to SWRMP for both the lateral expansion, and the waste export option as the alternative.

## How We Engaged

- A project page was open on Let's Talk Squamish, from May 18-September 16, 2022. Residents were able to ask questions and provide comments about the proposed focused amendment to allow for a landfill lateral expansion.
- Pop-up information sessions were hosted in Squamish (June 1 and 3), as well as in Whistler (May 31), Furry Creek (June 9), and Britannia Beach (June 5) to provide information about the proposed expansion.
- An online info session was hosted on June 8, to ensure that residents within the entire SLRD could be informed and provide feedback. A recording of the meeting was shared on the project page afterwards.
- Information about the engagement was shared on the District of Squamish social media channels. This includes standard social posts, as well as paid content to promote the engagement. The Resort Municipality of Whistler and the SLRD also shared details on their social media channels.
- Ads were placed in regional newspapers throughout the SLRD, including the Squamish Chief, Pique News Magazine (Whistler), Bridge River Lillooet News.
- Signage was placed at the current landfill to promote engagement.

- Comment cards were also available for people to fill out at the Squamish Landfill, the SLRD office in Pemberton, and Municipal Hall in Squamish.

### Who We Heard From

- **25 people** had conversations at the pop-ups
- **1 person** attended the online information session (**4 people** watched the recording afterwards)
- **2 letters** were received from the airport executive
- **221 page views** of the Let's Talk Squamish project page
- **9 questions and 6 ideas** were shared on the Let's Talk Squamish project page
- **4 comments cards** (hardcopy) were submitted
- **3 comments** were left on the Squamish.ca related to the lateral expansion
- **2 emails** were received by staff related to the lateral landfill expansion
- **1 presentation** to Squamish Nation staff, plus update emails
- **2 presentations** to the SLRD Solid Waste & Resource Management Advisory Committee
- **1 presentation** to the District of Squamish Council and the SLRD Board of Directors

### Next Steps

Solid waste in Squamish is authorized by the SLRD's Solid Waste & Resource Management Plan (SWRMP), published in 2016. The SWRMP is overseen by the Ministry of Environment and Climate Change Strategy (MOECCS). The feedback collected during this engagement will be submitted to the MOECCS as part of the formal application for a focused amendment to the SWRMP to allow for the lateral landfill expansion. We expect to hear back from MOECCS by the end of 2023. During this time, the District will conduct an archaeological impact assessment and environmental impact work, on the proposed site.

### Key Themes We Heard

Below is a list of key themes and the frequency that they were mentioned across all feedback platforms:

Key Theme	What We Heard and Frequency
Process	<ul style="list-style-type: none"> <li>• What is the next step? (1)</li> <li>• What triggered the MOECCS to be involved ? (1)</li> <li>• Is the MOECCS supportive? (1)</li> <li>• What happens when the landfill closes? (3)</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Expansion is needed (1)</li> <li>• Expansion plans look great (1)</li> <li>• No perfect solution but this makes sense (1)</li> <li>• Community should look after its own waste (1)</li> <li>• What other options exist? (3)</li> <li>• Is waste to energy an option? Why not (4)</li> <li>• WTE - technology is improving (1)</li> </ul>

	<ul style="list-style-type: none"> <li>• Consider neighbourhood district energy system (1)</li> <li>• What about waste export? (1)</li> <li>• Where would exported waste go? (1)</li> <li>• Waste export is problematic - reliant on trucking long distances (1)</li> <li>• What will be the fate of specific categories of waste? (1)</li> <li>• What happens if there is no extension?(1)</li> <li>• What happens if the Province says no? (1)</li> </ul>
Location	<ul style="list-style-type: none"> <li>• Where is the landfill? (1)</li> <li>• Why in Squamish and not a desert area? (1)</li> <li>• Who owns the land? (4)</li> <li>• What is the volume of the expansion? (1)</li> <li>• Will waste come from Whistler? (1)</li> </ul>
Environmental Impact	<ul style="list-style-type: none"> <li>• Is there an environmental impact assessment? (1)</li> <li>• How do you prevent environmental impact? (1)</li> <li>• How will bear management be handled? (1)</li> <li>• Need to protect the salmon due to proximity to the river (1)</li> <li>• What is the rock like under the landfill? (1)</li> <li>• How deep will the digging be/what will be the elevation? (2)</li> <li>• Why is a leachate treatment system needed? (2)</li> <li>• Where does the leachate go? (1)</li> <li>• What is leachate? (1)</li> <li>• Will there be gas collection? (1)</li> <li>• What is landfill gas? (1)</li> <li>• Interest in what is done with landfill gas? (4)</li> </ul>
Flooding	<ul style="list-style-type: none"> <li>• What if the river floods -will the water be deflected north? (1)</li> <li>• Is it in the floodplain zone? (1)</li> </ul>
Lifespan	<ul style="list-style-type: none"> <li>• When will the current landfill close? (3)</li> <li>• How long has it been open? (3)</li> <li>• What is the volume of the expansion? (1)</li> <li>• What is the lifespan of the expansion? (3)</li> <li>• When will the current landfill close? (3)</li> <li>• How long has it been open? (3)</li> <li>• What is the volume of the expansion? (1)</li> <li>• What is the lifespan of the expansion? (3)</li> </ul>
Waste Reduction and Improving the Landfill	<ul style="list-style-type: none"> <li>• How does this work with supporting the circular economy? (1)</li> <li>• Need to focus on producing less waste (1)</li> <li>• How is recycling and composting fitting in with the expansion? (1)</li> <li>• How will this be done? (1)</li> <li>• Please expand the entrance so truck-trailer can make U-turns /easier traffic flow if have multiple streams (3)</li> <li>• Have the recycling materials in the free area before going over the scale (1)</li> </ul>

	<ul style="list-style-type: none"> <li>• Would appreciate longer hours (2)</li> <li>• Where is the wood diversion business going? (1)</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• How much will it cost? (1)</li> </ul>

### Summary of What We Heard

Below is a list of all comments and questions the District heard during the engagement process. This list will be shared with the MOECCS as part of the application for a focused amendment to the SWRMP.

Engagement Activity	Comments or Questions
Pop-Up Sessions	<ul style="list-style-type: none"> <li>• What will you do about bear management?</li> <li>• Will Squamish take Resort Municipality of Whistler's garbage?</li> <li>• Does Squamish's material get recycled?</li> <li>• How close is the site to the river? Fishermen want salmon to be healthy.</li> <li>• How does it save GHGs to export?</li> <li>• What is the rock like under it?</li> <li>• How deep will you dig?</li> <li>• Do you own the land for expansion?</li> <li>• Do you own the land?</li> <li>• When will the current landfill close?</li> <li>• How long did the now-closed section last?</li> <li>• What will you do when the landfill closes?</li> <li>• How long will the process take?</li> <li>• What is required?</li> <li>• What is the other option besides landfill?</li> <li>• How long has the old site been open?</li> <li>• Why is there a leachate treatment system being built?</li> <li>• Why do you need a leachate plan?</li> <li>• Where is the wood diversion business going?</li> <li>• Who owns the land?</li> <li>• Where does the leachate go?</li> <li>• What is the need for the expansion?</li> <li>• How are you going to facilitate/make better the transfer station area?</li> <li>• Can you support circular economy with the expansion? How much will it cost?</li> <li>• Who owns the land?</li> <li>• What will happen if no extension?</li> <li>• Will there be gas collection?</li> <li>• What triggered MOECCS to be involved? Are they supportive?</li> <li>• Can we do waste-to-energy?</li> <li>• What about dog poo? Can you separate and recycle?</li> </ul>

	<ul style="list-style-type: none"> <li>• What happens if province says no?</li> <li>• What is the lifespan of the expansion?</li> <li>• Berm on North: What happens if the river floods? Will berm deflect water to the North?</li> <li>• Why not waste-to-energy? Germany does it in almost every town.</li> <li>• How long will it last?</li> <li>• Lifespan of the project?</li> <li>• Is there an environmental impact assessment?</li> <li>• What about waste export?</li> <li>• What is the next step?</li> <li>• What do you do with gas?</li> <li>• Is it in the floodplain zone?</li> <li>• Are there any other options?</li> <li>• Thanks for being here.</li> <li>• Source-Separation for ICI should be available and mandatory</li> <li>• Share more info about textile recycling.</li> <li>• Please don't do unmanned centralized garbage.</li> <li>• Please expand the entrance so truck and trailer can u-turn and not jackknife</li> <li>• Open at 8:00 a.m. in the summer to 6:00 p.m.. 9:00 a.m.-5:00 p.m. in the winter</li> <li>• Contactor discount 5%</li> <li>• Have a drop-off for ICI waste in the transfer station to keep truck and trailer out of landfill</li> <li>• Could do something with gas</li> <li>• We need it (the expansion)</li> <li>• What are you doing with the gas?</li> <li>• Why wasn't it advertised in the Furry Creek association?</li> <li>• No one composts</li> <li>• Waste-to-energy tech is improving. Incinerator burns clean.</li> <li>• Neighbourhood energy system should be considered for locals in the area.</li> <li>• What are you doing here?</li> <li>• What happens to my garbage?</li> <li>• How do you prevent all the leachate impacts on the environment?</li> <li>• What are the options?</li> <li>• What happens when it is full?</li> <li>• Why can't you take glass in the bins?</li> <li>• Where is the landfill?</li> <li>• Why can't I have glass pickup?</li> <li>• Where do dog poop bags go organics or garbage?</li> </ul>
Let's Talk Squamish	<ul style="list-style-type: none"> <li>• Question: Where will the exported waste go if such is needed. What will be the fate of specific categories of waste?</li> </ul>

	<ul style="list-style-type: none"> <li>• Should we not also look at another option, the one used extensively in densely populated Western Europe: A regional incineration facility?</li> <li>• Thank you for your quick answer regarding my question about a regional incineration facility. I am a bit confused about such a project not being financially feasible because of current disposal rates: You state under the heading 'Provincial Approvals' that the current solid waste disposal rate of Squamish is around 560kg/capita/year, but that for the Ministry to approve a WTE facility, the community has to get to 350kg/capita/year. Would we, according to these numbers, not already vastly exceed that provincial requirement? Furthermore timing: How do we expect to get to 'net zero' by 2030, when we have difficulty even to accommodate a relatively simple solid waste management strategy? This last one is a rhetorical question, and I am not expecting you to have an answer for it.</li> <li>• Has there been any consideration to the affect that an expansion of the landfill towards the Cheekye river may have on potential debris torrents? I know some of the geotech torrent models predicted material escaping at "the Dogleg" the 90 degree bend in the river by the dump. Would building a 400m wide berm towards the river prevent material evulsion and direct flows towards the Cheekye and IR11 communities?</li> <li>• Why are we not pursuing any waste to energy options?</li> <li>• I'm a waste management and recycling specialist and the only question I have is: Why? We can expand and expand forever - there is a lot of space in Canada - but eventually we just make waste mountains out of valleys. For a small municipality like Squamish, incineration and energetic use is the only viable and sustainable option. I have mentioned this multiple times at the district. Canada is 30 years behind European counterparts and landfill at this rate is no sustainable. We can talk Zero waste (or as call it 'greenwashing') all the time, but the minuscule solutions are not bringing the results needed. Squamish, and every other municipality and city in this country, needs serious sorting and incineration facilities. Regards, Falk</li> <li>• Thanks again for answering my follow-up question so quickly. If I interpret your answer correctly, Squamish has to reduce its current rate of 560kg/capita of waste per year to 350kg/capita to obtain provincial approval for a WTE facility, not because it is not financially feasible at the current disposal rates, which appear to be sufficient when reading your answer under 'Expense' to my first question, but because of what must be some arbitrary provincial target, namely the 350kg/capita/year. You state that this is "so that we don't have to rely on continued waste production to ensure that a WTE facility remains viable". Since your answer suggests that this number must be above the 350kg per year, it then begs the question of how many kilograms</li> </ul>
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	<p>of waste production are needed to make a WTE facility financially viable? That, to me, is the key question here. You raised another question by your comment about lateral landfill expansion, even with a WTE facility, to handle the end product from the process. According to what I know, waste processed by efficient incinerator facilities produce highly concentrated residue, but which is also to some extent toxic, so that it has to be disposed/stored in a proper manner. That would certainly have to exclude 'sprinkling' on top of a lateral landfill, wouldn't it? Lastly, your reference to space constraints and higher energy prices in Europe as prime reasons for WTE facilities being common in Europe: It seems to me that greater abundance of space in Canada should not be a license to treat that space with any less reference. As to energy pricing, I suppose you refer to the price of net surplus energy produced by the WTE facility, but isn't that a 'bonus', the main purpose of the whole operation being the elimination of as much solid waste as possible?</p> <ul style="list-style-type: none"> <li>• I had another follow-up question, or rather a request for further clarification after the answer you provided to my question below. Since I have not heard from you, I must assume that my message did not reach you, so I try again: We know that solid waste production is 560kg/capita/year in Squamish, but that the Province sets a target of 350kg/capita/year before giving approval for an incinerator (a Waste-to-Energy facility). Whatever the reason for this requirement may be, it does not answer the key question of what tonnage/kg is required to make a WTE financially viable. You also mention higher energy prices in Europe giving a boost to the viability of WTEs there. I assume this relates to net output of energy from the facility, and which would be competitive as an alternate source of energy in a high price environment. There is, of course, also the fact that lower overall energy prices lower the input costs, never mind attempting to market the energy output of the facility, and is a WTE facility not built foremost with the goal to eliminate/reduce waste to the smallest volume possible rather than as a source for energy production? Furthermore, you state in your answer that lateral landfill expansion would still be needed to deal with waster residue after incineration. What about toxic ash left after the process? Surely, our lateral landfill should not be the place to put that?</li> <li>• Who are the consultants for this project?</li> <li>• Occasionally, windblown plastic bags and litter are an issue. Conduct more frequent site cleanups.</li> <li>• The harder you make it to dispose of waste, the more waste you will find in the backcountry. Please ask MFLNRO about this.</li> <li>• Find ways of streamlining the process and making it easier to divert waste, Whistler's Re-use-it Centre is amazing.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Have as many waste diversion options at the landfill site as possible so that it's 'one stop drop' and easier to re-use/recycle than dump.</li> <li>• Have as many waste diversion options at the landfill site as possible so that it's 'one stop drop' and easier to re-use/recycle than dump. I envision a much larger (than we have now) drive through area - in one end and out the other - that can accept a wide variety of materials, with attendant on site or very well labeled bins so that people know where things go. Located before the scale, so you don't have to wait in line. Sufficiently large bins not to be overflowing. Incorporate social enterprise, or for-profit re-use organizations, so that someone could drop off re-usable building or household materials and recyclables, then continue on to drop landfill waste. Needs to be open when people can get there - current GFL hours are a disincentive to recycling. Landfill hours good, but doesn't accept all items and have to cross scale to drop glass and metal.</li> <li>• Current landfill lot and scale attendants are very good.</li> <li>• Allow glass, white styrofoam recycling in blue bins if possible.</li> </ul>
Comment Cards	<ul style="list-style-type: none"> <li>• Please do an advertisement campaign in the Chief about textile drop-off and what happens to it.</li> <li>• Need for easier traffic flow when passing the scale twice “when you have multiple streams” with a trailer, “need u-turn”</li> <li>• Need recycling materials to be free and before the scale</li> <li>• Landfill expansion plans looks great. Is there a chance we could get extended hours at GFL recycling in Squamish back as COVID numbers have come down? 3:00 p.m. closure is early and the landfill is far.</li> </ul>
Online Information Session (June 8)	<ul style="list-style-type: none"> <li>• The Sea to Sky region is growing so fast. The District has a big challenge to meet when it comes to landfill targets. Our focus needs to be on producing less waste overall, as it will be very challenging to meet landfill targets with a growing population.</li> <li>• Waste export seems particularly problematic as we shouldn't be reliant on large trucks taking our waste long distance away. I have been surprised to learn the long distances that some communities transport their waste in Western Canada.</li> <li>• The landfill gas collection system is very interesting. This is an innovative way to deal with a harmful substance and I am interested to see what uses the District is able to find for the gas going forward.</li> <li>• Question: How does recycling and composting fit into the landfill expansion?</li> </ul>
Squamish.ca	<ul style="list-style-type: none"> <li>• I do not believe that building an adjacent landfill is the answer, it is only going to invite more new residential construction and more complaints from the residents. The property taxes already in Squamish are already unrealistic, which this landfill expansion will only increase the property taxes. I think the District of Squamish</li> </ul>



	<p>should be thinking of the environment and build an incinerator to produce energy.</p> <ul style="list-style-type: none"><li>• I personally do not believe that a lateral or an additional vertical expansion is the solution here. A fiscally responsible solution for the long run would be an incinerator, as it would not only decrease the quantity of waste by a considerable amount, but would also provide production of both heat and power, as well as a reduction of pollution. Considering as well that using an incinerator would reduce the methane being released by the Landfill Waste, it is not an option to ignore. Money could also be spent towards additional Depot sites around Squamish, as the two in place are not nearly enough to compensate for the population looking to dispose of recyclables. More depot sites would increase recycling, decrease wait times, and overall decrease pollution as fewer cars will be idling or driving across town multiple times. If the District would like to move "beyond a landfill," I would suggest not building another landfill.</li><li>• There is no perfect solution but I can get behind a landfill beside the landfill. It would be good for our community to look after our own waste. Ideally we will have a large recycling area that we can drive safely in and out of rather than what is currently provided. I would like to see more enforcement to both businesses and residents to divert appropriately.</li></ul>
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