

# School District 48 Waste Management and Zero Waste Presentation Brief

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## **Proposal**

We ask the School District 48 Board to commit to implementing a district-wide, regulated, and effective three-stream waste reduction policy in all school facilities. We ask that a policy incorporating the points laid out in the “needs” section below is drafted and ready for approval at the August 2021 board meeting with implementation by the end of September.

Furthermore, we ask the Board to use this policy as a starting point to develop a Zero Waste action plan with a commitment to achieving Zero Waste to landfill and incineration by 2030. This would align SD48 waste management practices with the Squamish-Lillooet Regional District, which uses Zero Waste as a guiding principle (Squamish-Lillooet Regional District, n.d.). For a more thorough explanation of zero waste see the definitions section.

## **Waste and Climate Change**

In B.C, organic waste presently makes up around forty percent of municipal landfills (Ministry of Environment and Climate Change Strategy, 2020). Upon arriving in landfills, this waste decomposes and releases significant levels of greenhouse gases (Ministry of Environment and Climate Change Strategy, 2020). These gases increase global warming, contributing to climate change and the deadly effects that come with it. Misdirection of materials directly affects the areas in our school district; a 2016 landfill audit in Squamish found that over sixty-five percent of the waste in the landfill could have been recycled or composted (District of Squamish, 2017). The consequences of supporting these systems are immense and reach far beyond the borders of our district. Furthermore, they disproportionately impact Indigenous, Black, and other communities of colour, as well as groups already marginalized by social injustice (Climate Reality Project, 2021).

## **Background**

For the past five months, a team of Whistler Secondary students has looked closely at waste management and reduction strategies within the school. We have reviewed diversion data, analyzed waste schedules, met with municipal councillors and researched both waste management and zero waste policies within our community and school districts across BC. Based on stakeholder engagement and research, we have concluded that there is a lack of resources available to support waste reduction initiatives in SD48 Secondary Schools. Due to a lack of standard operating procedures surrounding waste management, we currently are failing to be in full compliance with municipal bylaws at multiple schools throughout our district. This lack of consistency also makes participating in waste programs challenging and creates a barrier for students to engage in reducing their own carbon footprint, since the expectations of what goes where is constantly changing. Additionally, as other school districts around BC continue to adopt ambitious sustainability policies, we are falling behind and not accurately reflecting SD48 values.

According to a 2010 Waste Composition Study from the Vancouver School Board, up to 80% of waste from Vancouver schools could be diverted from landfills by taking part in recycling

and organics programs (Vancouver School Board, 2019). Whistler Secondary’s diversion rate is presently 53%; however, due to inconsistencies in data, we believe this number to be significantly below 50%— a percentage not aligned with the standards of excellence for which our district strives. By implementing a waste management policy and committing to achieving zero waste by 2030, our district will join the ranks of local government and business leaders within our community who have already made this commitment.

Whistler Secondary 2020 Diversion Report:

[https://drive.google.com/file/d/1xf\\_mjdMo9aN871QCVsfqouzA\\_8vCS-KT/view?usp=sharing](https://drive.google.com/file/d/1xf_mjdMo9aN871QCVsfqouzA_8vCS-KT/view?usp=sharing)

### **Current Challenges at Whistler Secondary School**

#### *Presently*

This year, recycling and compost stations were removed from hallways due to COVID concerns. Small landfill bins exist in classes and washrooms, and a compost bin is accessible to foods’ students but not the general student population. To address contamination concerns around the virus, students were told to pack in and pack out waste. However, this method has not been effective as shown by the results in a recent student survey (see following page for reference to results). These factors have contributed to a contamination problem of recycling and organics in the waste WSS is sending to the landfill.

The current state of waste management also fails to comply with the RMOW Solid Waste Bylaw, updated in 2018, which says all industrial/commercial/institutional (ICI) parcels defined as “businesses, industries, or commercial operations including restaurants, stores, offices, hospitals, schools, and other similar operations... must separately collect Food Scraps, Organics, Recyclables and Landfill Waste for disposal.” (S.9 of 2018 bylaw)

#### *COVID Considerations*

We recognize that prior to Covid, some recycling and composting bins were available to students and that their removal was based on initial concerns around employee health and safety, but we ask this concern to be revisited in light of new research that has become available surrounding the spread of Covid. In a health expert address on the safety of reusables during the pandemic, 120 doctors signed the statement confirming, “based on the best available science and guidance from public health professionals, it is clear that reusable systems can be used safely by employing basic hygiene.” Furthermore, Vancouver Coastal Health released a statement aimed at addressing the concerns of waste management systems during the pandemic: “Generally, management of waste that is suspected or known to contain or be contaminated with COVID-19 does not require additional precautions beyond those already used to protect workers from the hazards they

encounter during their routine job tasks in solid waste, including medical waste, and wastewater management.”

Vancouver Coastal Health Statement:

<http://www.vch.ca/Documents/COVID-19%20Information%20for%20Waste%20Management.pdf>

Health Expert Statement Addressing Safety of Reusables and COVID-19:

<https://storage.googleapis.com/planet4-international-stateless/2020/06/26618dd6-health-expert-statement-reusables-safety.pdf>

Though over the past year, different systems have come into play, it is important to note that previous waste management systems prior to Covid also had challenges and were not effective in reducing waste contamination and running sustainably.

Pre-Covid:

Pre-Covid, student volunteers ran a diversion program for recycling and organics, however, due to student turnover and the level of time commitment required, issues regarding the program’s sustainability were present. Each year, new students had to be trained on disposal methods and have the additional time to contribute to actual disposal of the organics and recycling into an accessible place for the haulers. The number of student volunteers was insufficient to run a long-lasting program. We believe that in order to operate an effective program, responsibility for the disposal of the three streams should lie with district employees in all secondary schools.

### **Student Snapshot:**

122 WSS students responded to a series of questions regarding waste management at the school.

Full Results of the Student Survey:

<https://docs.google.com/presentation/d/1S11iDaODPLM-FMtGAXcts2tpy4SnwPVajJwVUrLGc1Q/edit?usp=sharing>

Major Findings:

- Only 3.3% of students would rate WSS recycling and compost as excellent (Fig. 1)
- Prior to Covid-19, 62% of students ranked WSS as a 3 or below when asked how well the school did with recycling and composting. (Fig 2.)
- 96% of respondents said that recycling and compost has gotten worse since Covid (Fig 3.)
- 19% of students always compost and recycle at school. 66% of students always recycle and compost at home
- When asked for opinions of what could help improve recycling and composting at WSS 59 of 82 respondents mentioned bin access, signage, or access to educational resources

As demonstrated below, only **3.3% of students would rate WSS recycling and compost excellent.**

Overall, how do you feel WSS is doing with recycling and composting?

121 responses

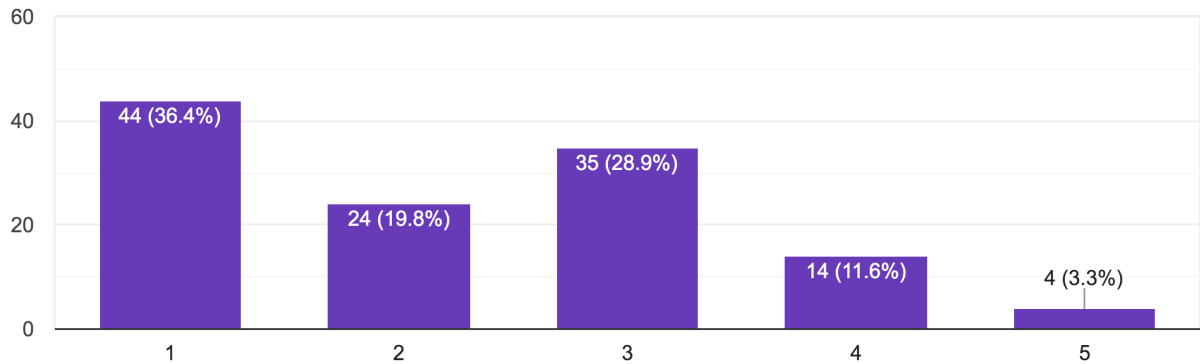


Figure 1. 122 students responded to how WSS is doing with recycling and composting with five being excellent and 1 being poorly. Just over 84% of respondents responded with a three or lower.

Prior to Covid-19, how well do you think our school did at COMPOSTING?

122 responses

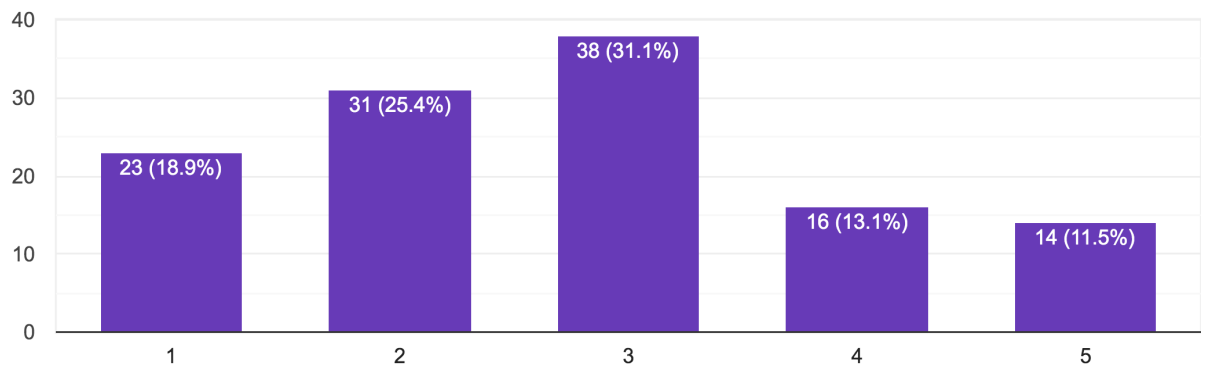
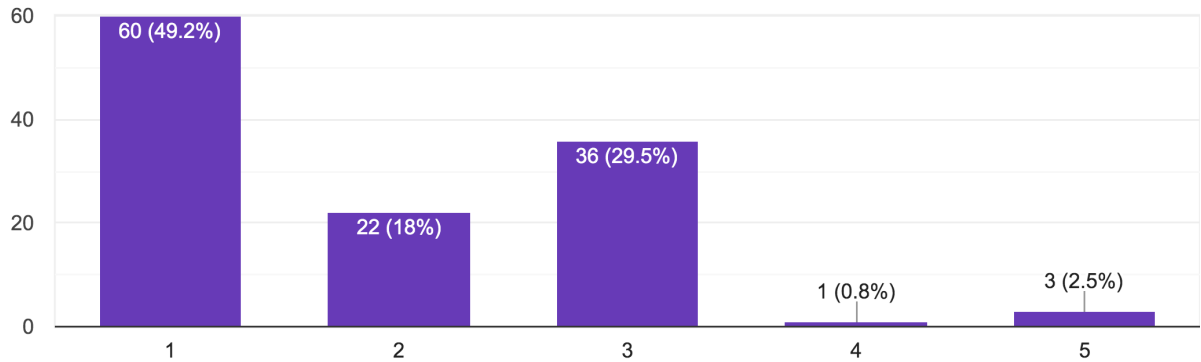


Fig 2. 62 percent of student respondents ranked school composting a three or below before COVID. Only twelve percent of respondents ranked the program as excellent.

Since the COVID-19 pandemic started, do you think the schools recycling and compost has gotten better or worse?

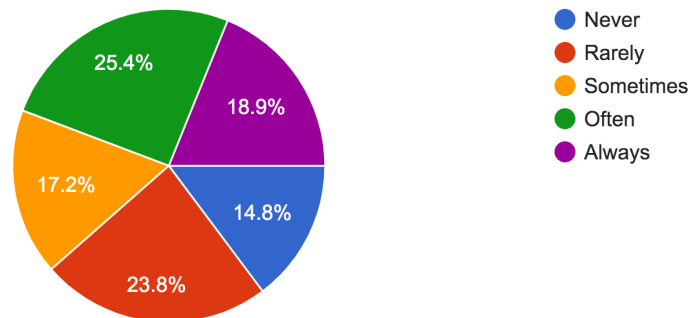
122 responses



**Fig 3. 96% of respondents said that recycling and compost has gotten worse since Covid.** Almost half of the students said it had gotten significantly worse.

How frequently do you recycle and compost at SCHOOL?

122 responses



**Fig 4. Under 20% of respondents always recycle and compost at school. 55% of respondents recycle and compost sometimes or less.**

How frequently do you recycle and compost at HOME?

122 responses

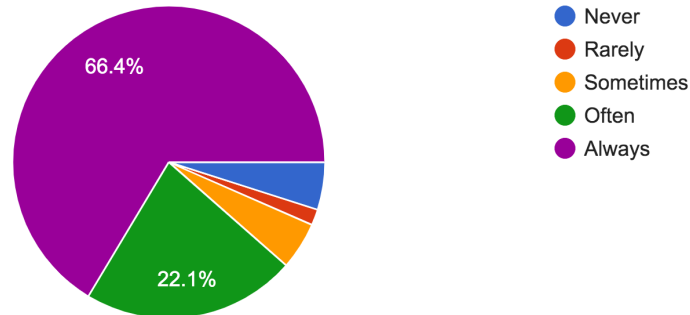


Fig 5. 5% of respondents never compost and recycle at home. Over 66% of respondents always compost and recycle at home.

### **Provincial Alignment**

#### *2008 Sustainability Education Framework.*

Development of an SD48 waste management policy and zero waste policy would align with the 2008 BC Ministry of Education, Sustainability Education Framework. This framework ‘encourages the K-12 education system to show leadership in adopting and promoting environmentally sustainable practices and learning opportunities for students that support healthy and natural environments for current and future generations.’

[www.bced.gov.bc.ca/greenschools/sustainability\\_ed.htm](http://www.bced.gov.bc.ca/greenschools/sustainability_ed.htm)

#### *2010 BC Sustainable School’s Best Practices Guide*

In response to the Sustainability Education Framework the Ministry of Education created the 2010 BC Sustainable School’s Best Practices Guide. The guide specifically emphasizes a district wide approach to sustainability and outlines the cost benefits of schools adopting waste reduction practices, stating that “through selective purchasing and waste reduction practices such as recycling and composting, schools can decrease the number of dumpsters being filled per month by as much as 50%.”

<https://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/teach/teaching-tools/environmental-learning/sustbestpractices.pdf>

#### *2018 Clean BC Climate Strategy*

This policy would also be in alignment with the 2018 Clean BC Climate Strategy, which outlines a circular economy approach and a shift away from waste as a throw away model.

[https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc\\_2018-bc-climate-strategy.pdf](https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_2018-bc-climate-strategy.pdf)

Other B.C School Districts:

- *Vancouver School Board Environmental Sustainability Plan:*

In 2018, the VSB approved an action plan to improve sustainability within the school district. Under Action 10 of the plan, VSB set actions to implement long-term resource conservation initiatives. This included a plan to improve waste diversion efficiency through facility and promotional improvements, develop a multi-year water conservation initiative and support school-level conservation projects:

[https://www.vsb.bc.ca/District/Sustainability/Documents/sbfile/181213/VSB\\_Env-Sust-Plan\\_Approved\\_2018-05-28\\_cover%20page\\_1.pdf](https://www.vsb.bc.ca/District/Sustainability/Documents/sbfile/181213/VSB_Env-Sust-Plan_Approved_2018-05-28_cover%20page_1.pdf)

- *Greater Victoria School District 2013 Waste Management Program:*

In 2013, the Greater Victoria School District published a standardized version of their waste management program explaining the roles and responsibilities of those involved in the program as well as what bins would be utilized.

<https://healthyschools.public.sd61.bc.ca/wp-content/uploads/sites/92/2015/12/GVSD-Waste-Management-Guide-for-Schools.pdf>

- *North Vancouver School District Waste Diversion in Schools Handbook:*

Teachers in North Vancouver created a handbook to link how learning about and practices waste management in schools directly related to the BC K-12 curriculum

<https://www.sd44.ca/District/Sustainability/Documents/WasteDiversionInSchoolsHandbook.pdf>

For more examples of district-wide sustainability approaches in BC, please see the Sustainable School's Best Practices Guide. It is also worth noting that as of February 2020, six school districts in B.C have declared a climate emergency and that climate emergency declarations have been passed in various levels of government across B.C.

<https://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/teach/teaching-tools/environmental-learning/sustbestpractices.pdf>

## **Local Government Alignment**

*Squamish-Lillooet Regional District (SLRD) Solid Waste and Resource Management Plan*

Under the Environmental Management Act, the SLRD Solid Waste Management Plan was developed. This plan regulates waste management for our region and states “the ultimate goal is



zero waste – all of our discards are regarded as resources”. The SLRD also has signage resources to ensure consistency across the district.

<https://www.slrd.bc.ca/sites/default/files/pdfs/UES/recycling-composting-solidwaste/SWRMP/SLRD%20SWRMP%202016-03-16.pdf>

*Resort Municipality of Whistler Solid Waste Bylaw*

- Reference letter
- More to come + reference link once RMOW website is running

*District of Squamish Solid Waste Utility and Regulation Bylaw 2375, 2015*

<https://squamish.ca/assets/Uploads/9927e56ddd/Solid-Waste-Bylaw-2375-Updated-January-2017.pdf>

- Every Person who deposits a Load at a Landfill that contains a quantity of Recyclable Material or Organic Material, as defined in this Bylaw, that exceeds either 5% of the total weight of the Load or 5% of the total volume of the Load must pay the Mixed Waste rate in the amounts set out in District of Squamish Fees Page 12 of 22 and Charges Bylaw, as amended.
- All apartment/condominium complexes (referred to as multi-family homes or MFH), commercial, industrial and institutional properties (ICI), events and other temporary users of a premises will be required to separate garbage, organics and recyclables prior to disposal.
- The owners/occupiers of the premises will be responsible for appropriately separating the solid waste streams prior to pick up by the waste hauler.
- Building managers/business owners will be required to provide educational material to residents, tenants, employees and contractors on how to separate and deposit waste, organics and recyclables into appropriate three-stream receptacles and put up related signage.

**Purpose**

Recognizing 'taking care of each other and our environment' as a part of our school district's guiding principles, as well as the BC Ministry of Education's goal to ensure students are prepared to contribute to a "healthy society and a prosperous and sustainable economy"(Sea to Sky School District 48, n.d.), we ask the SD48 Board to fulfill these commitments and address the needs outlined in this document. Beyond these guiding principles, we ask the Board to consider our future. Students are facing and will continue to face one of the most significant humanitarian and ecological crises of all time. In order to safeguard the futures of students, the culture built and fostered within the education system must shift to one of sustainability and addressing these needs are an opportunity to take a step in the right direction. Though not an all-encompassing solution, waste reduction is a key factor in individual action and deserves a place in SD48 policy.

## **Needs**

*These needs are initial steps in the long-term shift our district must make to ensure students contribute to a sustainable society. We ask that any desired revisions be fully explained and negotiated with WSS Environmental Club Students. We ask that student voices, as well as those of the Indigenous community, community members and field professionals, play a central and lasting role in sustainable policy for our school district.*

### **I. Implementation Responsibilities**

- A. Faculty, staff, and students are all responsible for appropriately separating waste into three streams.
- B. Custodians and/or a contracted third party are responsible for the transfer and the subsequent reporting of all required waste streams from indoor bins to the corresponding outdoor bins for collection from haulers.
- C. The school district will provide ongoing financial commitment to support the costs of required infrastructure, including sufficient signage, indoor collection, and outdoor bins in order to best comply with municipal waste bylaws and minimize contamination.

### **II. Education**

- A. Student clubs, staff, faculty, and community organizations will work together to educate the school community on proper waste management practices.
- B. The school district will provide an annual operating budget to each school to support student clubs, staff, faculty, and community organizations in obtaining the tools and resources necessary to deliver current education on waste management practices. Tools and resources may include but are not limited to, workshops, webinars, student-led awareness events, behavioral change campaigns, and policy development.

### **III. Commitment**

- A. Schools that belong to District 48 will commit to conducting waste composition audits at a minimum of every five years.
  - These audits can be done in partnership with school environmental clubs however organization, required resources and adequate instruction will fall to the responsibility of the school district.
- B. Any staff member who is required to complete a professional development plan must incorporate a minimum of one goal that supports improvement towards the school's environmental performance.
- C. A minimum of one professional development day per school year should have an environmentally focused theme to ensure teachers are provided with education and resources needed to support students in their understanding of climate change.

- D. With regards to the collection of refundable deposits, schools will prioritize working with school leadership clubs first, however, if adequate collection is not possible, community non-profit organizations that can offer consistent ongoing collection can be substituted. If neither of the previous options exist, then waste haulers who can provide refunds for this stream should be prioritized next and all refunds should be reinvested into the annual operating budget for education on waste management practices outlined by point II.b. of this section.

#### **IV. Purchasing Activities**

- A. Schools will purchase materials with an obligation and consideration of green procurement. Specifically endeavouring to source supplies that are superior from such viewpoints as conserving resources, preserving the environment, and enhancing recycling. At a minimum:
1. All single use disposables must be certified compostable (exceed ASTM6400); and
  2. All paper towel and toilet paper must be from 100% recycled content.
- B. The school district will review purchasing activities every two years to identify opportunities to become more sustainable.

#### **Definitions**

##### **Zero Waste:**

1. Zero Waste is defined as a whole systems approach that considers the flow of products and materials from the first stages of product and process design, through resource extraction, manufacturing, consumption and disposal (Squamish-Lillooet Regional District, n.d.).

2. The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health (Zero Waste International Alliance, 2018).

##### **Solid Waste:**

Solid waste is any discarded or abandoned material. Solid wastes can be solid or semi-solid in nature and includes Recyclables, Organics and Landfill Waste (RMOW, 2017).

##### **Green procurement:**

Green procurement involves buying goods and services that are less harmful to human health and the environment than competing products that serve the same purpose (Office of the Auditor General of Canada, 2005).

##### **Diversion:**

The prevention and reduction of generated waste through source reduction, recycling, reuse and composting (EPA, 2020).

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