LESS WASTE, MORE FUTURE:
Uncovering the Drivers of Waste at AMS Club Events

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Prepared for: Alma Mater Society, SEEDS

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ams SUSTAINABILITY

PROJECT **GOALS**

1. Establish a baseline of waste sorting practices at AMS club events.
2. Identify barriers to proper waste sorting through focus groups with AMS club executives.
3. Propose updates to the Waste Management Guidelines for Fall 2025 AMS Club Executive Orientation.
4. Develop a Priority Matrix to guide stakeholders on effective waste management actions.

PROJECT **OBJECTIVES**

- Analyze waste sorting at AMS club events using data from the 2024 AMS Waste Audit and on-site observations.
- Conduct focus groups (4-6 executives per group) to identify challenges and opportunities for improving waste management.
- Develop actionable waste management interventions, including new commitments, educational content, and AMS-led waste reduction initiatives.
- Use a Priority Matrix to evaluate solutions based on sustainability impact and implementation feasibility (cost, time, and AMS executive engagement).

AMS Sustainability

SEEDS Sustainability Program
Student Research Report

Prepared for AMS Student Services
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PRACTITONER SUMMARY

UNCOVERING THE DRIVERS OF **WASTE** AT AMS CLUB EVENTS

LFS 450: Leadership in Campus Food System Sustainability

RESEARCH **BACKGROUND**

Waste sorting is a key method for reducing pollution and promoting environmental sustainability, particularly in community settings like UBC. Despite the availability of recycling and composting infrastructure, a significant portion of waste in North America continues to end up in landfills (Zelenika et al., 2018). Events, especially those involving **food and beverages**, are among the leading contributors to waste contamination at post-secondary institutions.

North American households currently divert only 33-35% of their waste, well below the potential 75-90% (Zelenika et al., 2018), highlighting the inefficiency of waste management practices. Improper waste management in landfills leads to environmental risks, including soil and water contamination and increased greenhouse gas emissions. The rapid acceleration of global warming over the past century underscores the urgent need for improved waste strategies (Tol, 2024).

METHODS

WASTE AUDIT REVIEW
from the 2024 waste audit conducted by AMS Sustainability

3 WASTE AUDITS
At the Performance Theatre in the Nest

2 FOCUS GROUPS
With UBC Club Executives

KEY **FINDINGS**

FOCUS GROUP **RESULTS**

1The results highlight the importance of waste reduction, with a strong emphasis on minimizing paper use and promoting reusable materials. There is a need for executive-wide training on sustainability practices, as club leaders see value in structured guidance. However, challenges such as varying packaging types make sorting difficult. Additionally, providing reusable dishware and support for cleaning could enhance sustainability efforts.

OBSERVATIONAL **RESULTS**

Trash sorting compartments and clearly labeled, accessible receptacles are uncommon. There is no assistance provided for proper waste sorting, nor are there any incentives to encourage waste reduction. Attendees seldom read bin labels and rarely consider where an item belongs before disposing of it, leading to frequent misplacement of waste.

SURVEY **RESULTS**

1. Waste sorting is highly important to club executives.
2. Club executives are somewhat likely to present a presentation if provided by the AMS.
3. AMS has not provided adequate resources for waste management.

Executive Summary

This report examines the behavioral and structural factors contributing to improper waste sorting at student-led events organized by Alma Mater Society (AMS) clubs at the University of British Columbia (UBC). Despite existing infrastructure and waste guidelines, a persistent gap remains between club executives' intentions and actual waste management practices. This misalignment results in significant landfill-bound waste and undermines UBC's broader environmental goals.

The report used mixed research methods including secondary analysis of the 2024 AMS Waste Audit, passive observations at four events, a Qualtrics survey of club executives, and two in-person focus groups. This study revealed a clear disconnect between clubs' sustainability values and their event practices. Data indicates that while executives express strong support for waste reduction, only 57% of waste is correctly sorted, with nearly one-third still ending up in landfill. While over 97% of club executives report confidence in identifying the correct waste bins, observational data conducted over the semester revealed a major gap between this confidence and actual sorting behavior. Observations highlighted the absence of labeled or accessible bins, minimal guidance, and no incentives or assistance provided to attendees. Attendee behaviour further emphasized these gaps, with participants who often failed to read bin labels or consider where their waste should go prior to disposal.

Key barriers include inconsistent signage, inadequate training, inadequate infrastructure at event sites, and confusion over food packaging. While AMS club executives express high motivation and sustainability values, their actions are often constrained by unclear guidance logistical challenges, as a result of undersupport by the AMS. Focus group data indicated a need for comprehensive training, consistent packaging, and more explicit AMS support. Indeed, survey data confirmed a perceived lack of institutional assistance. Interestingly, though, data also revealed a limited willingness to engage with educational resources if offered by the AMS, suggesting there may be greater consumer behaviour barriers beyond inaccessible resources. This disconnect between knowledge, intention, and action shows a need for better support, clearer guidelines, and more accountability.

To bridge these gaps, the report presents a set of immediate and long-term recommendations for the AMS association, SEEDS, UBC Sustainability, and club executives. Short term actions for AMS include ensuring all event spaces have accessible waste infrastructure, updating signage, and providing standardized compostable packaging. Club executives are encouraged to assign a dedicated "waste executive" for each event and incorporate waste planning into logistics. Long-term strategies involve mandatory executive training, random waste audits with accountability measures, and developing an AI-based waste sorting guide tailored to specific event waste streams. Future research is also encouraged to evaluate long-term behavior change, infrastructure impacts, and more targeted interventions based on club types.

Ultimately, this project provides a data-driven and community based evaluation for improving waste management at UBC club events and supporting a more sustainable future at UBC. Through coordinated action, better support systems, and stronger accountability, UBC can move closer to its 2030 Zero Waste goals and foster a culture of sustainability among future leaders.

Table of Contents

List of Figures

List of Tables

Abbreviations and Key Terms

	Abbreviation	Definition
I.	UBC	University of British Columbia
II.	AMS	Alma Mater Society
III.	SEEDS	Social Ecological Economic Development Studies
IV.	CBAR	Community Based Action Research

Introduction

1.1 Research Topic

The project investigates the behavioural and structural drivers of improper waste sorting at events held by Alma Mater Society (AMS) clubs, and the significant inefficiencies that prevent proper waste management practices. Although UBC has invested in sustainability infrastructure and guidelines for waste diversion, such as “Sort It Out” bins and the Zero Waste Action Plan, several student-led events continue to mismanage waste. This inconsistency represents both a problem and an opportunity; this research explores the sources of inefficient sorting, high contamination rates, but also the opportunity to improve waste management through action and research based recommendations for club executives, the AMS association, SEEDS and UBC Sustainability. Our research specifically addresses the disconnect between stated environmental values and observed behaviours by exposing the root causes of sorting failures and offering interventions for change.

1.2 Research Relevance

This research is relevant to broader societal efforts to mitigate climate change and reduce pollution, as improper waste sorting contributes to landfill dependency, water and soil contamination rates and greenhouse gas emissions. Identifying the disconnect between sustainability values and behaviours among young leaders, such as students at a major post-secondary institution, sheds light on the broader issue of environmental action vs. intention: a gap that is all too common in many urban communities. By improving waste diversion rates at campus events, this project supports the goals of UBC’s 2030 Zero Waste Action Plan and sustainability initiatives, which aims to divert 80% of campus waste from landfills. Our findings provide actionable insights that support institutional missions to contribute to UBC’s sustainability discourse.

Interventions aim to motivate student communities to take ownership of their environmental impact through better education, planning, and collaboration. AMS club executives and their event participants generate significant waste, but also serve as platforms for modelling sustainability— by directly involving club leaders in observations, surveys, and focus groups, the project aims to capture their needs and limitations as well as empower them to be a part of the solution.

1.3 Project Context & Background

The project builds on the 2024 AMS Waste Audit, which was conducted during Climate Emergency Week and AMS Sustainability Week. This audit demonstrated that 70.13% of total waste in the AMS Nest was diverted from landfill; however, only 57% of the waste was correctly sorted, with particularly low sorting accuracy in the recycling stream (35%), indicating a significant gap in implementation. Compost performed well (90%+ correctly sorted), while recycling and garbage streams showed significant contamination. The audit also identified a lack of clarity in existing waste guidelines and inconsistencies in packaging and sorting infrastructure. These findings were demonstrated in our primary data collection, which included passive observations at AMS events, qualtrics surveys with club executives, and focus groups. Ultimately, the data uncovered gaps in waste management knowledge, inconsistencies in behavior, and a lack of structural support and incentives for clubs attempting to implement sustainable practices.

Previous studies indicate that environmental mismanagement is not merely a technical issue, but also a social one (Zelenika et al., 2018; Gullion & Tiltan, 2020). People often believe they know how to sort waste, but when infrastructure falls short and behavioural cues are poor, their follow through is weak. Our project builds on these insights with the use of a Community-Based Action Research (CBAR) approach combining institutional data (the AMS Waste Audit) with qualitative methods (observations, surveys, and focus groups) to paint a more holistic picture of club-level waste practices.

1.4 Research Purpose, Goals, and Objectives

The purpose of this project is to establish a baseline for waste sorting performance at AMS club events by evaluating waste sorting practices at AMS club events and develop targeted recommendations to improve current systems. The primary goals are to provide data-driven insights that inform institutional sustainability strategies, increase awareness of waste management challenges on campus, and support student-led initiatives by identifying opportunities for structural improvement and behavioral change. To achieve these goals, the project’s objectives are to analyze existing waste audit data; conduct in-person observations, surveys, and focus

groups; identify behavioral trends and barriers; and provide a priority matrix to help AMS and its partners implement high-impact solutions efficiently and effectively.

Background

Proper waste sorting is a critical part of sustainable waste management, influencing environmental sustainability and landfill diversion rates. At the University of British Columbia (UBC), where over 350 student led clubs often host events that involve food and drink, waste contamination is an extremely pertinent issue. Even with the presence of waste sorting infrastructure such as recycling and compost bins and efforts by UBC and AMS to create supportive waste diversion systems, a large portion of waste continues to be thrown in the improper bins at events, causing increased landfill use and a lack of efficiency in recycling efforts. The improper sorting of waste at UBC Alma Mater Society (AMS) club events reflects only a small portion of waste missorting challenges that urban communities face.

Research on waste management has shown the importance of the behavioral changes, policy initiatives, and infrastructure improvements in mitigating waste contamination. Scholarly research indicates that waste sorting is not solely a technical challenge, though. It is deeply interconnected with social and behavioural challenges. Indeed, theoretical frameworks suggest that accurate waste disposal relies on more than the presence of infrastructure, but on the alignment of individual behaviour, organizational culture, and contextual design (Ajzen, 1991; Stern, 2000). Studies suggest that despite the availability of waste sorting facilities, behavioural factors such as lack of knowledge, convenience, and personal attitudes toward waste disposal strongly influence individuals' sorting practices (Zelenika et al., 2018).

Gullion & Tiltan (2020) argue that effective waste management requires community involvement, education, and consistent support, especially in decentralized settings such as student organizations. Indeed, Zelenika et al. (2018) demonstrated that experiential learning in sustainability (i.e. through guided programs or peer modelling) significantly improved sorting accuracy and long-term environmental commitment. In contrast, relying on passive strategies, such as signage alone, was insufficient without behaviourally engaging interventions. These insights provide the conceptual foundation for our study's methodology, interpretation of results, and development of actional recommendations.

Waste Sorting at UBC: Policies and Existing Efforts

UBC has implemented several policies aimed at reducing waste and increasing sustainability on campus. The Zero Waste Action Plan and the Zero Waste Food Ware Strategy were introduced to reduce operational waste disposal by 50% by 2030, focusing on resource efficiency and responsible consumption (UBC Sustainability, 2022). The plan focuses on the increasing diversion of organic waste, rising from 559 tonnes in 2013 to 1055 tonnes in 2019, showcasing the university's progress in sustainability efforts.

The AMS, in collaboration with UBC's SEEDS Sustainability Program, has taken steps to assess and improve waste management at student-led events. In 2024, a waste audit conducted at an AMS executive event revealed roughly 80% of waste brought into events was either recyclables, compostables or paper. Despite available resources such as the "Sort it Out" signage and AMS sustainability guidelines, there is room for improvement in ensuring that club events align with UBC's broader waste management goals.

Identified Gaps and Need for Current Research

While existing studies and university policies tell us the importance of proper waste sorting, there remains a lack of specific research on how AMS club events contribute to waste mismanagement. The 2024 waste audit gives a glimpse of sorting behaviors during a single event but does not account for broader trends across multiple events and student groups. Additionally, prior research suggests that self reported data on waste sorting is often overly confident compared to observed behaviors (Liu et al., 2024), indicating a need for direct observation and qualitative insights. To address these gaps, this study seeks to establish a foundational understanding of waste sorting practices at AMS club events, explore the behavioral and structural barriers to proper waste sorting, and propose interventions that can be implemented by the AMS. By incorporating both observational data and community feedback through focus groups, this research aims to bridge the disconnect between policy intentions and real life practices, ensuring that AMS clubs are equipped with actionable strategies to enhance waste management.

Research Methodology and Methods

RESEARCH METHODOLOGY

Our research methodology was to use qualitative analysis to reconcile the findings within the AMS Sustainability's 2024 Waste Audit. The philosophical foundation of our methods was to critically analyze differences between self-reported waste sorting and behavioural practices. How do club executives execute their environmental promises? Does muscle memory or herd mentality override proper practice and knowledge? Is there an underlying cycle of bad habits or lazy practices that needs to be broken? We planned to observe as bystanders at AMS club events to determine these behaviours. In terms of our overall approach to data collection, our research utilized a Community Based Action Research (CBAR) approach. CBAR uses community partners to achieve tangible goals and objectives (Gullion & Tiltan, 2020). Following CBAR ensured that community members were informed, supported, and taken into consideration at every stage of the research project. CBAR was most prevalent in our focus groups as we were directly interacting with the community and receiving feedback. Our methodology was designed to critically explore the disparities between AMS club executives' self-reported waste sorting behaviours and their actual practices at events.

RESEARCH METHODS

TO ADDRESS OUR RESEARCH QUESTIONS, WE USED FOUR PRIMARY DATA SOURCES: THE 2024 AMS WASTE AUDIT (SECONDARY DATA), PASSIVE OBSERVATIONS AT CLUB EVENTS, A QUALTRICS SURVEY OF AMS CLUB EXECUTIVES, AND IN PERSON FOCUS GROUPS. THIS MULTI-PRONGED APPROACH ENSURED A HOLISTIC OVERVIEW OF WASTE BEHAVIOURS, STRUCTURAL BARRIERS, AND PARTICIPANT/EXECUTIVE ATTITUDES.

SECONDARY DATA COLLECTION RESEARCH METHODS

Our group utilised a report conducted by UBC AMS Sustainability in 2024. The report, *Waste Audit Report*, involved sorting the contents within prominent waste sorting stations on campus into their respective streams (Wong-Abdul et al., 2024). Sustainability members let event participants sort their own waste into respective trash, recycling, paper, and compost bins provided by UBC. When the event was over, the team re-sorted each bag of waste and reweighed each pile to determine whether club executives had accurately sorted their waste. The audit was conducted over a 24 hour collection period. In order to ensure an accurate representation of waste sorting, the audit was conducted without student knowledge (Wong-Abdul et al., 2024). This dataset provided a quantitative baseline, allowing us to compare primary research findings with institutional performance metrics.

Types of Data Collected

UBC Sustainability's research methods included manual waste collection. Bags of waste were collected by UBC custodial staff every two hours over the 24 hour period. Waste bags were stored in the Interactive Sustainability Centre (ISC) within the Nest (Wong-Abdul et al., 2024). Qualitative data was collected using bathroom scales. Each bag of waste collected was weighed to one decimal place once it entered the ISC. After the bags had been correctly resorted into UBC's four proper "Sort It Out" waste streams, they were re-weighed using the same measurement process (Wong-Abdul et al., 2024).

Results

The Sustainability team found that the executives had properly sorted only 57% of waste, and diverted only 70% of waste from the landfill (Wong-Abdul et al., 2024).

Primary Data Collection Research Methods

Our group utilised three types of methods for primary data collection: Passive observation, online surveys, and focus groups. Passive observations and focus groups were conducted in-person, whereas online surveys were conducted virtually.

Overarching Data Collection Research Methods

Administration and Recruitment Process

To initiate contact with potential participants for Qualtrics surveys and focus groups, our team utilized one of our stakeholders, AMS Sustainability, as a point of contact. AMS Sustainability had access to the contact information of AMS club executives, our target participants for data collection. AMS Sustainability was able to directly email club executives to garner participation for our Qualtrics survey and focus group sessions. Finally, AMS Sustainability helped provide scheduling for club events taking place in the Nest. With access to this scheduling, our team could select events to attend to conduct our passive observations.

General Data Collection Timeline

We began data collection with our first passive observation event on March 9th, 2025. Our data collection concluded with our last focus group session on March 21st, 2025.

Method #1: Passive Observation

We chose the method of passive observation in order to determine whether the data collected in the AMS Sustainability audit was representative of the generalized data collection. Four observations took place over the span of 3 weeks, consisting of 1+ hour observations each (See Appendix A). During observations, the research team carefully observed how club members sorted waste at food/drink based events. This method was performed in person because it involved recording firsthand observations of waste sorting and participant behaviour.

Research Participants

This research was conducted among UBC AMS club executives as well as club members. Our rationale for this participant selection was that these samples matched the exact target population of our study.

Data Collection Tools

Our team relied on electronic data collection in the form of Google Sheets. This platform allowed us to structure our observations and create a template for the events we attended, ensuring uniform data collection.

Event:	Date:	Duration:	Location:
CITR Annual General Meeting	Tuesday, 03/11/2025	2 hours (6-8pm)	Nest Performance Theatre[1]
UBC KABA: Boodle Fight	Saturday, 03/15/2025	1 hour (8-9pm)	Nest Performance Theatre
AMS Poker Club: Poker Club Tournament	Sunday, 03/16/2025	1 hour (4-5pm)	Nest Performance Theatre
Asean Malaysia Club: Malaysia Singapore Night	Wednesday, 03/19/2025	1 hour (9-10pm)	Nest Great Hall

Table 1: Observational Data Collection Timeline + Locations

Rationale for Data Collection

Passive observation is the strategy of observing a situation without actively interacting or influencing it (Simon Fraser University, 2018). This was highly important to our group, as we didn't want to disrupt the behaviours of sorting that each club had established. Sitting on the sidelines at each event helped us play close attention to each bin and identify causes of improper sorting. Our rationale behind this method was that passive

[1] Observations were conducted in the Performance Theatre as the Nest Great Hall was closed due to construction on 03/11/2025.

observation does not disrupt a club's behavioural sorting pattern, which subsequently helps identify causes of improper sorting.

Method #2: Qualtrics Survey

Our second method of data collection was an online survey. Our team framed questions around waste sorting behaviours and proper waste sorting, and participants had the option to swipe along a scale to rank how deeply they identified with each item.

Research Participants

This research method was conducted exclusively among AMS club executives. Our rationale for this participant selection was that these subjects represented the most valuable stakeholder of our research. Their input and concerns directly define how we formulate our recommendations and priority matrix, as they are the party that our study hopes to impact.

Data Collection Tools

Our team performed the survey using Qualtrics, an online survey-making program (See Appendix B).

Data Collection Timeline + Locations

All of our data was conducted online via Qualtrics. Survey responses were collected from March 18-21st, 2025.

Rationale for Data Collection

Our group had not initially planned to use online surveys as we thought the quality of responses would be less fruitful than in-person focus groups. However, stakeholders urged data collection with this method as surveys acted as a great way to collect responses from as many club executives as possible, and to a holistic understanding of many perspectives. The Qualtrics surveys garnered more responses due to their low time commitment and easy to use format (45 total).

Method #3: Focus Groups

Our final method of data collection was in the form of focus groups. A focus group is a group interview that asks guiding questions to allow group members to build off one another's responses (Fessenden, 2024). We chose this method in order to gather qualitative input from our research subjects themselves: UBC AMS executives. To gain a comprehensive understanding of our participant's perspectives, we split our questions into three themes. The first two were value and knowledge based, whereas the last set asked executives about their stance on changing waste sorting practices in the future.

This method was conducted in person because of its collaborative aspect. Meeting in person allows for more open communication, allowing participants to build off one another's ideas and produce rich, actionable insights that informed our recommendations. (Forbes Magazine, 2024).

Research Participants

The research participants in our focus groups were exclusively AMS club executives. We recruited these participants via our Qualtrics survey. After completing our survey questions, club executives could volunteer to partake in our focus group as well. As a result of the surveys, we were able to recruit six executives from a variety of AMS clubs.

Data Collection Tools

Real time transcription was conducted using Google Docs (see Appendix C). This platform gave us the opportunity to interact with each other's notes and findings in real time. We chose this over paper transcribing because it was more time efficient. Our team members were thus able to transcribe what focus group members said in real-time.

Event:	Date:	Duration:	Location:
Focus Group #1	Wednesday, 03/19/2025	1 hour (1pm-2pm)	Interactive Sustainability Centre (Life0017 inside the Nest)
Focus Group #2	Friday, 03/21/2025	1 hour (1pm-2pm)	Interactive Sustainability Centre (Life0017 inside the Nest)

Table 2: Focus group data Collection Timeline + Locations

Rationale for Data Collection

Focus groups are a data collection method that allows for maximum participation and collaboration (Forbes Magazine, 2024). This was the definitive rationale in our decision to perform focus groups rather than one-on-one interviews or simply Qualtrics surveys. We felt that including several different clubs in the same focus group would offer new perspectives, increasing the overall collaborative response to our questions.

Results

These data collection methods yielded interesting results that highlight the discrepancy between AMS club executive action vs. intention when approaching waste sorting at events. Although executives state that trash is highly important to them, their actions (i.e. accessibility of trash receptacles at events and support for waste management for attendees) state otherwise. The following figures convey these conclusions.

1. **Executive Provisions**

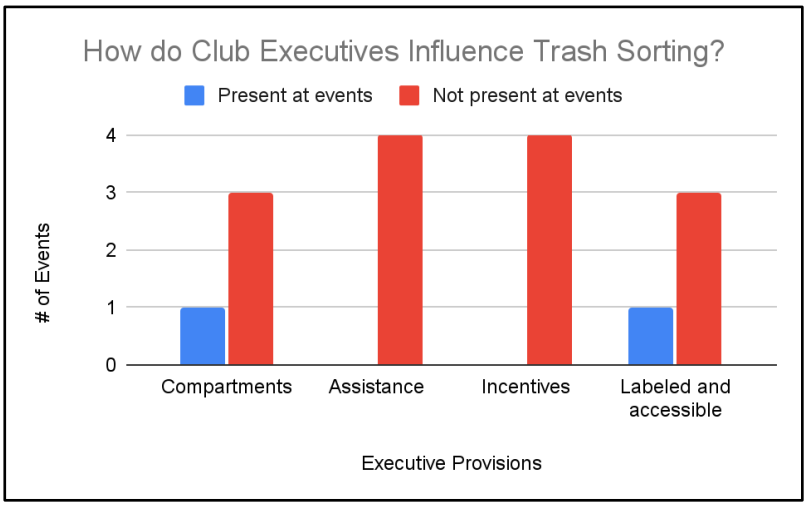

Figure 1: Observational data from four events indicating the presence of different sorting compartments, assistance with trash-sorting, incentives for waste reduction, and labeled/accessible.

This figure highlights a critical gap in the structural setup of AMS club events with respect to waste management. Observation of AMS executives at four different events revealed that executives had provided appropriate compartments and labelled/accessible receptacles for waste sorting at only one event. Even more strikingly, there were no incentives offered at any of the events to encourage sustainable behavior, such as discounts for bringing reusable containers, nor assistance for waste sorting. These findings reveal a pattern of logistical oversight — while AMS club executives may prioritize waste sorting in theory, there is little evidence of this value being operationalized in their event planning. This lack of infrastructure likely contributes to attendee confusion and low sorting accuracy, as observed in subsequent figures.

2. **Executive attitudes: Survey**

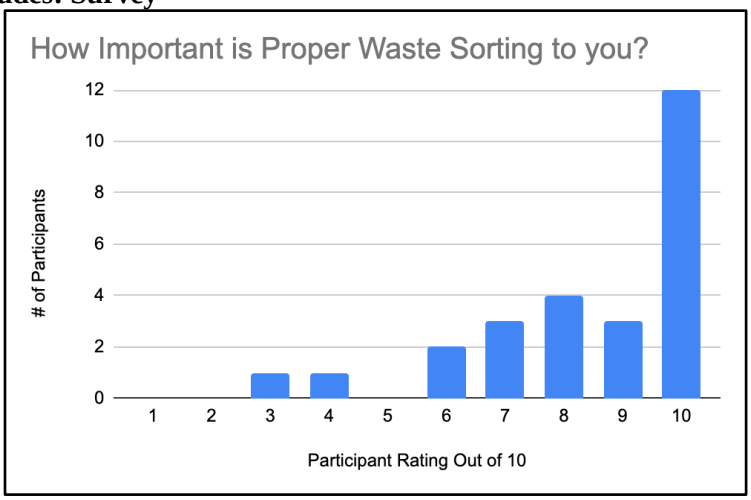

Figure 2: Survey data from club executives indicating how important proper waste sorting is to them.

Survey responses in Figure 3 reflect that the majority of AMS club executives deem waste sorting is moderately to highly important, aligning with UBC's broader sustainability mission. This widespread acknowledgment of importance suggests a strong foundational value system among club leadership. However, the responses also show a small but noteworthy number of executives who view waste sorting as less critical, signaling that not all clubs are equally invested.

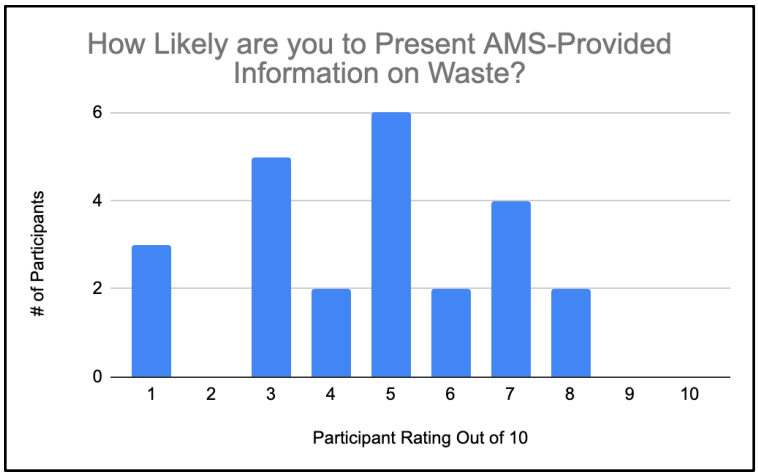

Figure 3: Survey data asking club executives how likely they are to present a slideshow regarding proper waste sorting to their event participants if AMS provided the presentation.

Despite acknowledging the importance of sustainability, club executives expressed limited willingness to actively present waste sorting materials at events, even if these were pre-designed and provided by AMS. No respondents gave the highest possible endorsement (10/10), most responses clustered in the mid-range, and a couple indicated no interest. Understanding this reluctance is essential — addressing it may require more than offering materials; AMS might need to integrate these responsibilities into club mandates or provide incentives for participation.

3. Executive attitudes: Focus Group

Metric	Results	Focus Group Quote
Importance	Highly important	"Really important," "Hugely important"
Planning	Minimize paper, Reuse	"Minimal paper material, just reused gear for their club"
Motivation	Provide reusables	"The nest could supply plates and have nest staff wash the plates"
AMS Training	Executive-wide training, Examples	"Club president training… That could be good if it was provided to execs"
Challenges	Different packaging	"Everything… [has] so many components"

Table 3: Focus group data indicating executive attitudes about the importance of waste sorting, how they incorporate waste management into their event planning, what motivators would encourage better waste practices, what type of training AMS could provide, and the challenges they face when trying to achieve waste sorting goals.

Focus group responses revealed that AMS club executives strongly value proper waste sorting and actively attempt to integrate sustainable practices into their event planning, such as reusing materials and minimizing paper. However, they also identified key barriers to effective implementation, including complex

packaging, limited training, and a lack of logistical support. Expanding the scope of training to include executive-wide training would be beneficial instead of only a president-wide training, where examples of proper waste sorting is provided. They also emphasized a desire for executive-wide AMS training rather than limiting training to club presidents. Overall, while motivation is high, consistent execution is hindered by systemic and structural challenges.

4. AMS Guidance

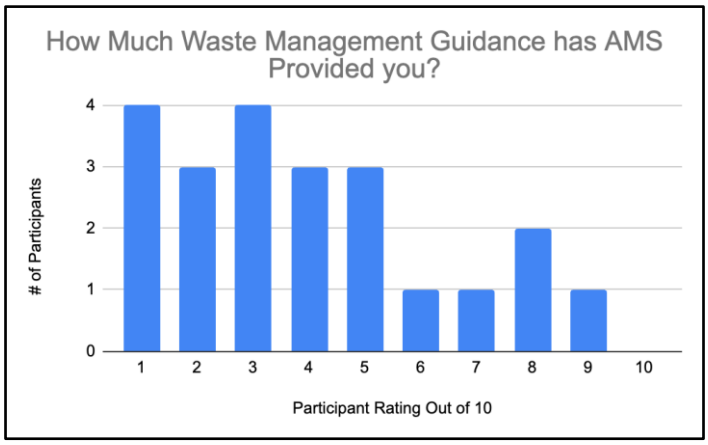

Figure 4: Survey data asking club executives about the amount of waste management guidance the AMS association has provided them.

This figure illustrates a perceived lack of support from AMS in helping clubs implement effective waste management. While a few executives think it is sufficient/good, the overall trend suggests a widespread perception of under-support. This finding is critical because it demonstrates that despite the motivation for individual executives to improve their practices, institutional limitations, such as vague policies, lack of templates or infrastructure, and minimal training, may serve as barriers to change.

5. Waste sorting rating

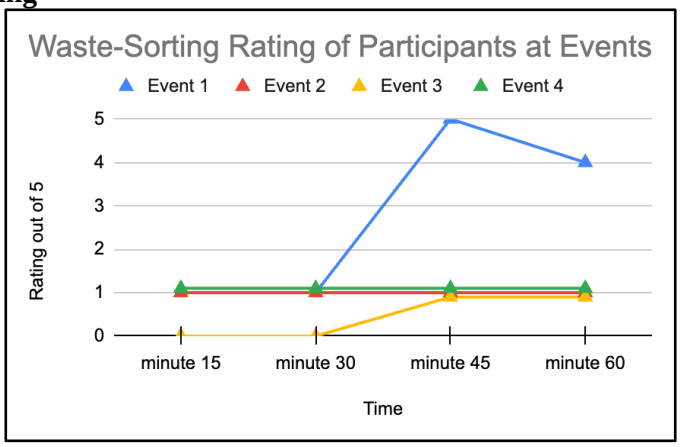

Figure 5: Observational data from four events demonstrating the overall accuracy of participant waste sorting in 15 minute increments.

The fluctuating sorting accuracy depicted in Figure 2 indicates inconsistent participant behavior during events. In Event 1, sorting accuracy improved over time, which may suggest that as bins filled and became more visually distinct, attendees made more conscious efforts to sort properly — or perhaps that fewer attendees remained toward the end, leading to less chaos and better focus. In contrast, Events 2 and 4 showed consistently poor performance, and Event 3 saw no waste disposal early on, followed by significant errors later. These waste sorting patterns reveal that behaviour is not only inconsistent across clubs, but also variable within an event, reinforcing the need for interventions involving practical event support.

6. **Event attendee attitudes**

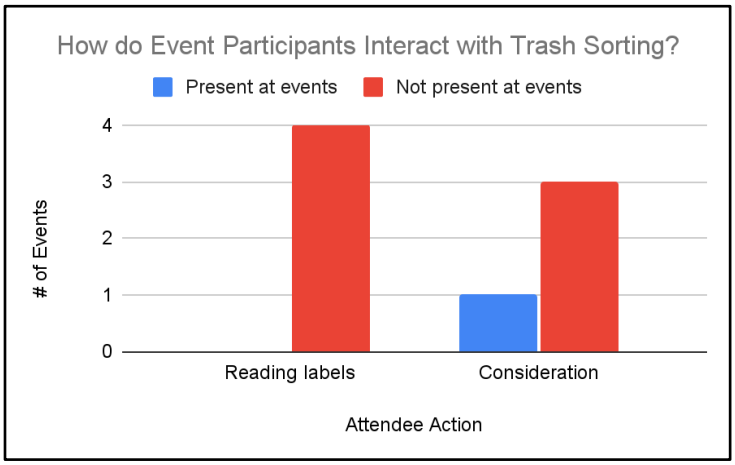

Figure 6: Observational data from four events indicating whether event participants read bin labels (if provided) and if they considered where waste goes before throwing it.

Figure 6 provides perhaps the clearest evidence of the behavioral disconnect between infrastructure and action. Across all four observed events, attendees were rarely seen reading bin labels, and only in one instance did participants appear to reflect on where their waste should go before disposing of it. In half of the events, this is due to a lack of labels or waste sorting infrastructure. This indicates that signage must be visible when sorting infrastructure exists— events can not have the former without the latter.

Secondary Data

1. **Waste sorting knowledge: Club training survey**

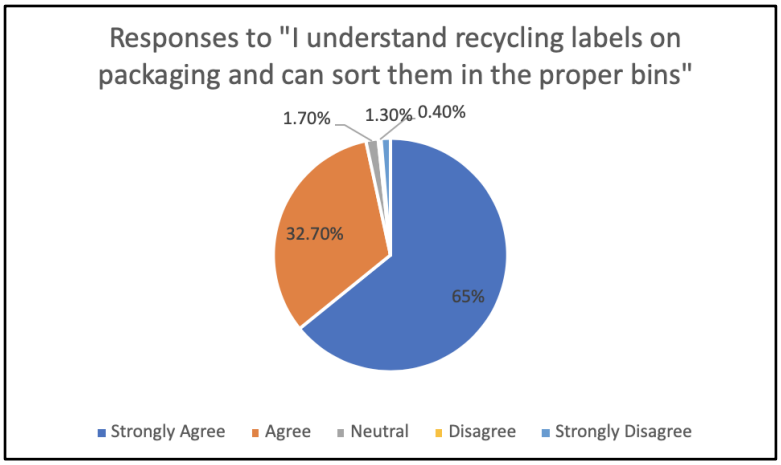

Figure 7: Self-reported understanding of recycling labels and sorting ability among AMS club executives.

Secondary data collected from the AMS Club Training Survey and the 2024 Waste Audit provides a revealing look into the discrepancies between perceived and actual waste management practices at AMS events. According to the survey, over 97% of respondents expressed confidence in their ability to understand recycling labels and correctly sort waste. Approximately 65% strongly agreed with the statement, and 32.7% agreed, suggesting a high level of self-reported knowledge and awareness.

2. Waste produced at events: 2024 Waste Audit

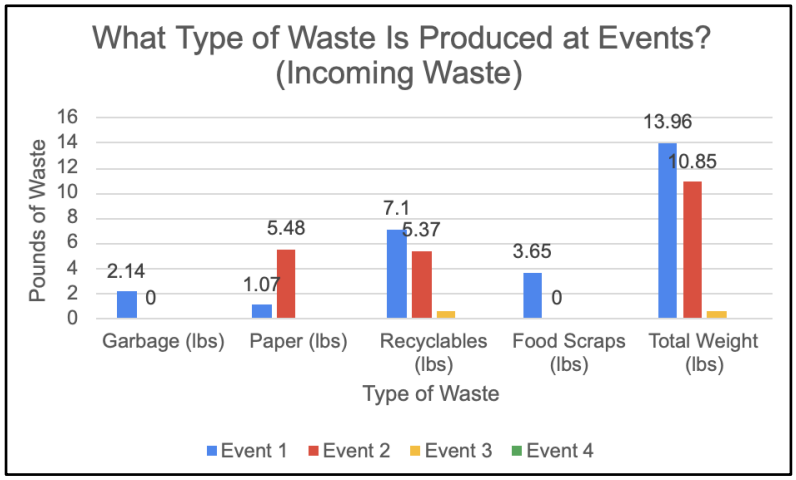

Figure 8: Type and weight of incoming waste at AMS club events, categorized by event.

Despite these confident self-assessments, the 2024 waste audit tells a more complicated story. Audit data revealed that approximately 80% of waste brought into events was recyclable, compostable, or paper-based. Yet, every event still produced a significant amount of landfill-bound garbage as outgoing waste. For example, food scraps and recyclables that could have been diverted often ended up in the garbage, indicating a disconnect between knowledge and actual behavior.

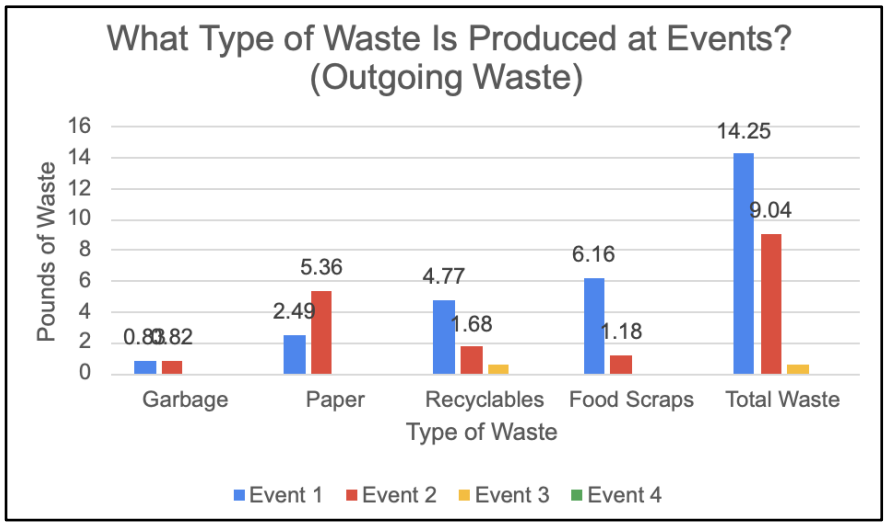

Figure 9: Type and weight of outgoing waste at AMS club events.

This gap is further emphasized when comparing incoming and outgoing waste weights. While events brought in materials that were mostly divertible, the outgoing waste streams consistently included residual garbage, revealing inefficiencies in sorting practices during or after the event. Additionally, the audit found that some events lacked any sorting infrastructure, compounding the mismanagement issue. Although clubs may intend to sort waste correctly, systemic issues such as lack of accessible bins, time constraints, and unclear signage may prevent effective execution.

The issue of waste mismanagement at AMS club events is reflective of broader sustainability challenges faced by post-secondary institutions. While UBC has introduced ambitious policies to reduce waste and increase diversion rates, the effectiveness of these initiatives depends on student engagement and compliance at the organizational level. This research aims to contribute meaningful insights into waste sorting behaviors, identify key barriers, and propose possible solutions to align AMS club events with UBC's sustainability objectives. By doing so, it will provide a data driven foundation for future AMS policies and serve as a model for improving waste management at student-led events in higher education settings.

Discussion

The conclusions drawn reveal a strong disconnect between the stated values and actual practices of AMS club executives with regard to waste sorting. Through a triangulated research design involving direct observations, surveys, and focus groups, we uncovered a systemic pattern: while clubs express strong commitment to sustainability, execution often fails to reflect this intention. Perhaps the most striking finding from the 2024 AMS Waste Audit was that although over 97% of respondents in the AMS Club Training Survey stated they understand recycling labels and feel confident in their sorting abilities, only 57% of waste was correctly sorted.

Additionally, focus group participants consistently stated the importance of sustainable practices and expressed a willingness to act. However, our observational data and waste audit findings tell a different story. Observations at four food-based events further confirmed the discrepancy evident in the 2024 AMS Waste Audit—bins were often unlabeled, inaccessible, or entirely absent. Attendees were rarely seen reading signage or reflecting on their waste disposal choices. A substantial portion of recyclables and compostables were misdirected into landfill streams. This unexpected outcome, particularly given that sorting instructions and AMS guidelines are readily available, suggests that while knowledge and intention exists, it is not translating into behavior. This mirrors findings in the literature, where knowledge does not always equate to action (Zelenika et al., 2018).

The gap between intention and behavior may be explained by structural and organizational issues. Our results suggest that a lack of clear responsibility, inadequate setup support, and logistical barriers (such as difficulties managing reusables) contribute to poor implementation. For instance, during focus groups, club executives often cited washing and storage concerns as reasons for avoiding reusables, despite an interest in sustainable options. Furthermore, survey responses demonstrated that although executives agreed waste sorting was important, few were highly willing to deliver sorting instructions to attendees, even when provided with ready-to-use materials, and in practice, waste-related information was not displayed at most events. This suggests a need for stronger accountability and streamlined support systems from AMS.

Our findings strongly fulfill the project's stated purpose: to establish a baseline for waste sorting performance at AMS club events by evaluating waste sorting practices at AMS club events and develop targeted recommendations to improve current systems. Each of our goals— to inform campus strategy, support student sustainability, and bridge intention and action— was addressed through a combination of institutional audit data and direct engagement with executives. The research objectives were systematically completed; the recommendations are rooted in both data and executive/participant attitudes.

An unexpected finding was the extent of inaccessibility to proper waste sorting options at events. Despite AMS's publicly available guidelines and stated environmental objectives, several events had no sorting bins or signage. This absence points to a systemic breakdown not in knowledge, but in follow-through and accountability. The discrepancy between executive claims of valuing waste sorting and their reluctance to engage with the resources provided (e.g., AMS slides) was also surprising. Although post-secondary campuses often rely on student leadership to advance sustainability, our research indicates that without strong institutional support and accountability mechanisms, even highly motivated students may fall short of their sustainability intentions.

Future research could expand the sample size of events and clubs observed, investigate motivations for ignoring sustainability mandates, or test interventions (e.g., bin placement or training modules) at club events. As UBC keeps pushing ahead with its 2030 Zero Waste goals, understanding the social and logistical gaps that affect policy implementation will be essential.

There are several limitations to this research. First, the observational sample was small and focused only on events held in specific rooms, which may not reflect wider practices across all AMS clubs. Second, the focus groups included a limited number of executives (six executives from three clubs), possibly leading to biased or non-representative views. Additionally, because participation in the survey and focus groups was voluntary, responses may reflect a bias for individuals that already express an interest in sustainability, excluding less-engaged clubs.

Recommendations

Our findings show clear behavioral and structural gaps in waste sorting practices at AMS club events. While student leaders value proper waste disposal, they lack support, clear guidelines, and consistent infrastructure. To address these gaps, we propose a set of actionable and research-focused recommendations which are categorized by stakeholder responsibility and timeline. Within each category, suggestions are made based on highest to lowest priority after considering impact, feasibility, and potential associated cost.

Recommendations for Action

Immediate Actions (0–6 months)	
AMS Association	**Ensure accessible waste bins** are available in all AMS-affiliated event spaces. Observations revealed that many events lacked any sorting infrastructure, which served as the primary barrier to event attendees participating in proper waste sorting. As such, ensuring receptacles within event spaces such as the Great Hall and the Performance Theatre, with the option to expand the number of and capacity of bins to accommodate for large events, is of utmost importance.
	Coordinate with Campus and Community Planning to update the Sort It Out guidelines to **make labelled and accessible bins mandatory at club events**. Colour-coded and image based versions are available on UBC Sustainability's website; printing several laminated and reusable versions for executives to post at club events could ensure waste sorting instructions are more accessible and help eliminate confusion among both executives and event attendees.
	Provide standardized packaging for food sold at Nest outlets. Fully compostable packaging— perhaps with labels on the package indicating it is compostable— in the same colour, shape, and size options at all AMS Nest food outlets is recommended. Consistency in packaging would reduce contamination rates by making materials easier to identify and eliminate confusion on waste sorting. Though not directly related to club events, this was one of the barriers to proper waste sorting identified during the focus groups.
SEEDS and UBC Sustainability	**Recruit and train student volunteers** to assist with live waste sorting during large events, especially those involving food. This initiative would provide real-time support for proper sorting and simultaneously act as a peer education tool, which literature cites as critical to ensuring long-term environmental commitment.
Club Executives	Assign a **designated waste executive** for each event. This designated executive, with support from AMS, could be responsible for ensuring proper waste infrastructure at each event, overseeing trash disposal, and liaising with the AMS to ensure protocols are up to date. This would ensure someone is directly responsible for implementing and assisting with waste management practices, which can serve as another peer education tool.
	Encourage participation in **AMS campaigns related to sustainability and waste**. Club involvement in broader initiatives helps inform executives and club members of waste management and create a sense of community in reaching sustainability goals.
Mid- to Long-Term Actions (6–18 months)	
	Implement **mandatory random waste audits** at club events using spaces such as the Great Hall or the Performance Theatre with penalties for noncompliance. These waste audits should be made clear to executives prior to the start of the school year, with enforcement from 1-2 AMS Association candidates checking for proper waste sorting practices. A checklist should

	be made for ease of enforcement, including items such as, “Club executives addressed proper waste management with attendees prior to the start of the event.” Penalties should be clearly outlined to executives by the AMS Association at the annual mandatory Presidents training.
AMS Association	Incorporate **mandatory waste management training** into the Fall 2025 AMS Club Executive Orientation. Training should include what type of waste goes into which bin, introduction of any changes to waste sorting management (i.e. updated bin signage), and penalties for noncompliance with rules. This suggestion would provide a clear understanding of proper sorting protocols to executives and clarify the AMS’s sustainability expectations. If random waste audits have been implemented (point 1 above), they may be introduced at the training.
	Create a website or platform that creates a **personalized waste sorting assistance guide** catered to the specific trash generated at a given event. The website can ask executives to type out all the waste they expect to see at their events (for example: food waste, plastic wrappers, cardboard boxes), and generative artificial intelligence (AI) could generate a guide that details exactly which bin each one goes into. This guide can be projected onto a screen for executives to display to attendees.
Club Executives	Develop and integrate **a waste management plan** into event proposals and logistics, in the form of proposal forms or logistical checklists. This plan could include strategies for bin placement, signage, volunteer roles, and packaging choices. This encourages clubs to consider sustainability prior to event planning to make standards and protocols clear, not simply as an afterthought.
	Partner with other clubs and AMS to reuse event materials such as signage, decoration, and dishware. Items like directional signs, themed décor, tableware, or centerpieces can be stored centrally for accessibility. Creating a shared inventory or borrowing system for reusable event materials can encourage collaboration, reduce waste generation, and the cost of events. This may support a circular model of waste reduction.
Recommendations for Future Research	
Education and Engagement	Conduct **follow-up surveys and focus groups** with club executives to evaluate whether updated signage, training, and implemented suggestions are being utilized effectively. This can be done at recurring intervals (i.e. after every term or every school year) with similar incentives for participation. feedback provided by surveys will be used for future policy proposals.
	Assess the **impact of AMS-led campaigns on participant behavior** at events, such as such as poster drives, social media outreach, and sustainability-themed weeks. There should be a focus on long-term retention of proper sorting habits by conducting pre and post campaign observations at club events with surveys and interviews.
Infrastructure and Policy	**Study the effectiveness of improved infrastructure** such as the implementation of waste bins in all AMS-affiliated event spaces.and volunteer support on sorting accuracy. Ensuring that the incorporation of sorting infrastructure and waste bins has been implemented in spaces where club events might be held and evaluating the difference between waste generated before and after infrastructure has been added.
	Evaluate how packaging standardization across Nest food vendors influences waste contamination levels. Include analysis on any changes within properly sorted waste items that had a change in packaging. The feedback provided from these observations can help influence future changes in packaging among items that had significant improvements on waste sorting.

Longitudinal Monitoring	Continue to conduct **biannual waste audits** in alignment with the AMS Sustainable Action Plan (ASAP 2026). These audits will help track progress to adjust future strategies. Any changes between biannual audits can be communicated between AMS associates and SEEDS representatives to adapt policies and recommendations. The hope is to continue offering tangible solutions such as the ones included within this report.
	Investigate whether specific club types (e.g., food-focused vs. academic) or event formats correlate with better or worse sorting behavior to better target interventions. Events that include excess waste should have a **strong sustainability plan** as well as sufficient designated club executives and student volunteers to assist with waste sorting.

Conclusion

This report highlights a critical gap between the sustainability values expressed by AMS club executives and the actual waste sorting practices observed at student-led events at the University of British Columbia. Improper waste sorting at AMS club events is more than a logistical oversight—it is a pressing environmental issue that undermines UBC's sustainability goals and reflects a broader disconnect between student intentions and tangible actions. Despite strong support for waste reduction among AMS club executives, current practices fall short of expectations. The majority of waste continues to be mismanaged, not due to a lack of awareness, but due to structural gaps, unclear guidelines, and insufficient support. This study highlights a critical opportunity for the AMS, SEEDS, and UBC Sustainability to intervene with targeted, student-centered solutions that transform good intentions into real-world impact.

Through a comprehensive mixed-methods approach—drawing from observational data, survey insights, and focus group discussions—this project reveals that the barriers to proper sorting are both behavioral and systemic. While club leaders claim confidence in their waste knowledge, on-the-ground observations show misalignment between knowledge and action. Inaccessible bins, inconsistent signage, and lack of support at events are key contributors to this issue. The findings underscore the urgent need for a coordinated and well-resourced strategy that embeds sustainability more deeply into the culture of student-led events.

The recommendations presented—ranging from improved signage and standardized packaging to dedicated waste roles and mandatory training—offer a practical roadmap for change. If implemented, these actions can meaningfully reduce contamination, increase diversion rates, and empower students to take ownership of their environmental footprint. By closing the gap between intention and execution, UBC has the potential to set a new standard for waste management on university campuses and inspire a new generation of environmental leaders.

Ultimately, this report affirms that effective waste sorting is not only an environmental necessity—it is a community responsibility. The path to a zero-waste future at UBC depends on collective action, thoughtful design, and the courage to turn values into outcomes. With renewed investment and collaborative effort, AMS club events can become not only more sustainable but also more aligned with the leadership and innovation that define the UBC student experience.

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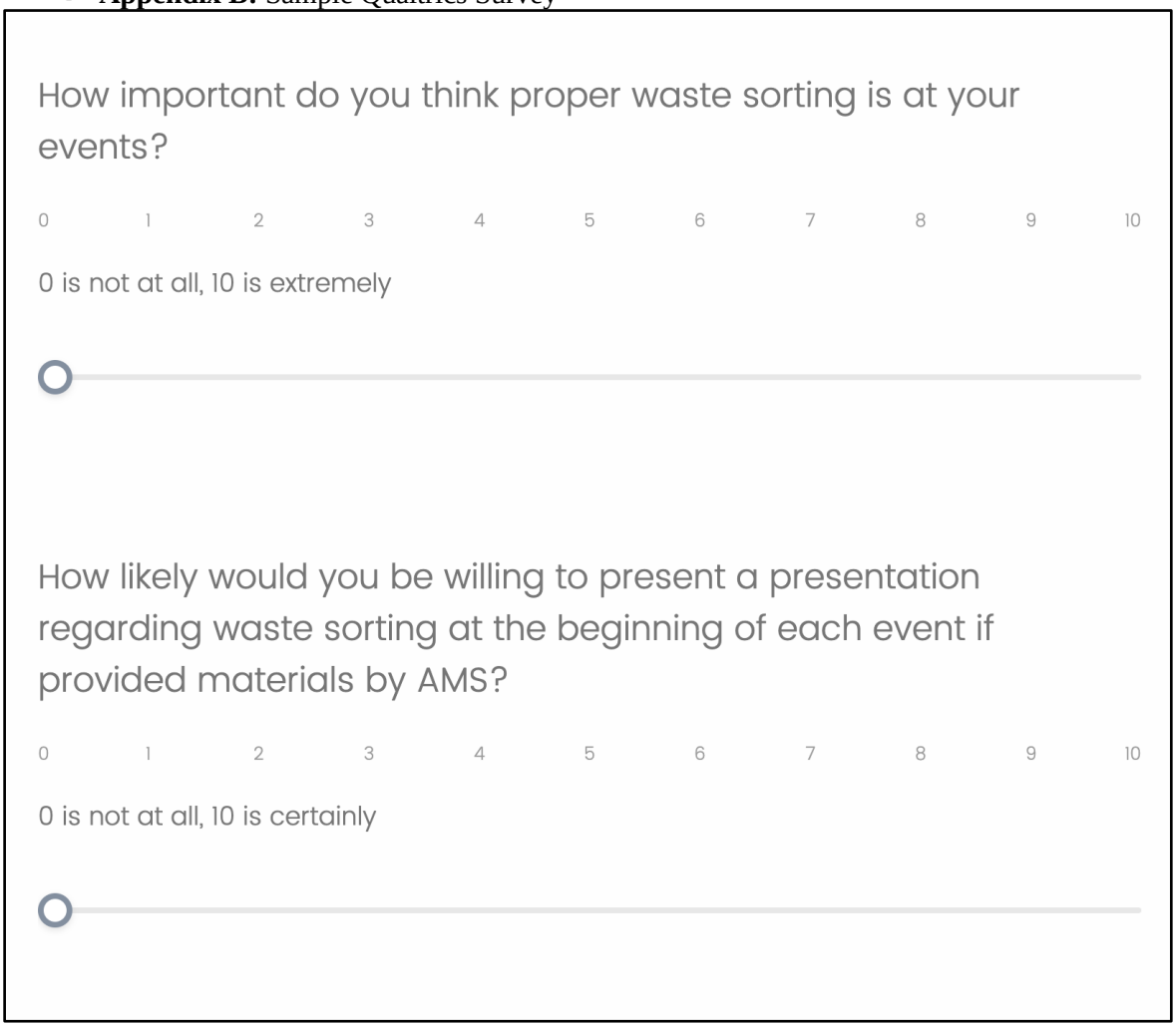
Appendices

➔ **Appendix A:** Passive Observation Recordings

Event:				
Date: March 15				
	min 0-15	min 15-30	min 30-45	min 45-60 (clean up)
Are proper sorting compartments provided? (e.g. general waste, recycling, organic waste)				
What types of waste are most commonly disposed of at the event? (e.g. food scraps, plastic utensils, paper plates)				
Are attendees properly sorting waste into correct bins?				
Do attendees read waste bin labels before disposing of items?				
Do attendees take time to consider where waste goes before sorting?				
Do event organizers or volunteers assist with waste sorting, or is it entirely attendee-driven				
What was the most common missorted item?				
Are waste bins clearly labeled and accessible for attendees?				
Do they use single use or reusable items? What is the ratio?				
How much of each type of waste is in each bin after the event? (general waste, recycling, food scraps)				
Are there incentives for waste reduction? (i.e. bring your own mug)				

➔ **Appendix B:** Sample Qualtrics Survey



➔ **Appendix C:** Focus Group Questions

QUESTIONS	NOTES
Icebreaker: Introduce yourself (name, year, faculty) and what show/book have you been into lately?	
VALUES	
How important do you think proper waste sorting is, and why?	
Do you factor waste management in your event planning? Like signs, staff or digital tools (e.g. apps, QR codes) to guide waste disposal?	
What would motivate you to sort trash better? I.e. Would providing reusable containers and cutlery make it easier to reduce waste? Is that something you would be interested in?	

KNOWLEDGE	
How confident do you feel about correctly sorting your waste? Why or why not?	
Have you seen any creative or effective waste management strategies at other events or locations?	
How do you currently receive information/knowledge about waste sorting practices? If no response, we can let them know it can be anything from signage to training.	
How much guidance on waste management has AMS provided you? If no response: What resources do you wish they provided?	
FUTURE IMPLICATIONS	
How likely would you be willing to present trash sorting methodology if provided materials from AMS? presentation at the beginning of the event to introduce proper waste sorting?	
If you could implement one change at club events to improve waste management, what would it be?	
Are there any hurdles or challenges that prevent you/club members from sorting trash correctly? If no response: Perhaps logistical or budget constraints that limit waste sorting efforts?	
Is there anything else that you would like to mention that we have not brought up already?	

**Questions in blue are ones that our SEEDS and AMS stakeholders requested are asked in every focus group.