

# Student Perceptions of Water Bottle Refilling on Campus

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A refillable water bottle tucked into exterior side pocket of a student's backpack.<sup>5</sup> Photo by [Bluewater Sweden](#) on [Unsplash](#)

## Overview

"Responsible Consumption and Production" is one of the United Nations' Sustainable Development Goals.<sup>1</sup> This goal, however, is impeded by the large-scale consumption of single-use plastic water bottles—they are a major pollutant and source of waste. A survey conducted during the 2018/19 school year indicated that 80% of McMaster University student residents used single-use water bottles on campus.<sup>2</sup> While previous literature indicated university students' interest in sustainable alternatives including the use of water bottle refill stations.<sup>3</sup> Introducing campus-wide policies such as banning single-use bottles without student consultation may have unintended consequences (i.e., consumption of unhealthier drinks, increased plastic waste).<sup>4</sup> This provided impetus for us to interview McMaster University student residents to understand their current perceptions on water bottle refilling and banning of single-use water bottle sales on campus. The goal of this project was to help inform potential solutions to address plastic water bottle waste at McMaster University, guided by student feedback.

## Objectives

1. Gather perceptions of McMaster University students regarding refillable water bottle usage
2. Perform thematic analysis to identify significant trends in the qualitative data
3. Share our results and recommendations with relevant stakeholders

## Reporting

To achieve our first objective, we conducted interviews with four participants. These participants were first-year undergraduate students at McMaster University with a pre-identified interest in sustainability. During the interviews, we inquired about how they obtain and consume their water on campus, specifically collecting perceptions on reusable and non-reusable water sources. Regarding our second objective, our research team performed thematic analysis on the interview transcripts. First, we learned that accessibility is a major influence in student water consumption. Accessibility related to proximity and cost; the closer and less-expensive water sources were, the more appealing they are to students. In addition, we discovered that hygiene-related factors impacted students' water usage. Participants preferred high-quality and filtered water sources, and the COVID-19 pandemic limited their use of public water fountains. Given these themes, we advise decision makers to implement more accessible (i.e., proximate and low-cost) and hygienic (i.e., filtered and contactless) low-waste water sources across campus. These initiatives can take on many forms, including the installation of more contactless refill stations. These findings and recommendations were presented to the McMaster Sustainability Advisory Council (MSAC). McMaster recently formed a Bring Your Own Bottle working group made up of students, faculty, and staff. The group launched a website with FAQs and a place for an interactive map of the more than 300 water refill stations on campus. This website is linked [here](#). We are grateful to know our findings can contribute to positive, sustainable change at McMaster University.

## Collaborators

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See a full list of references [here](#).

