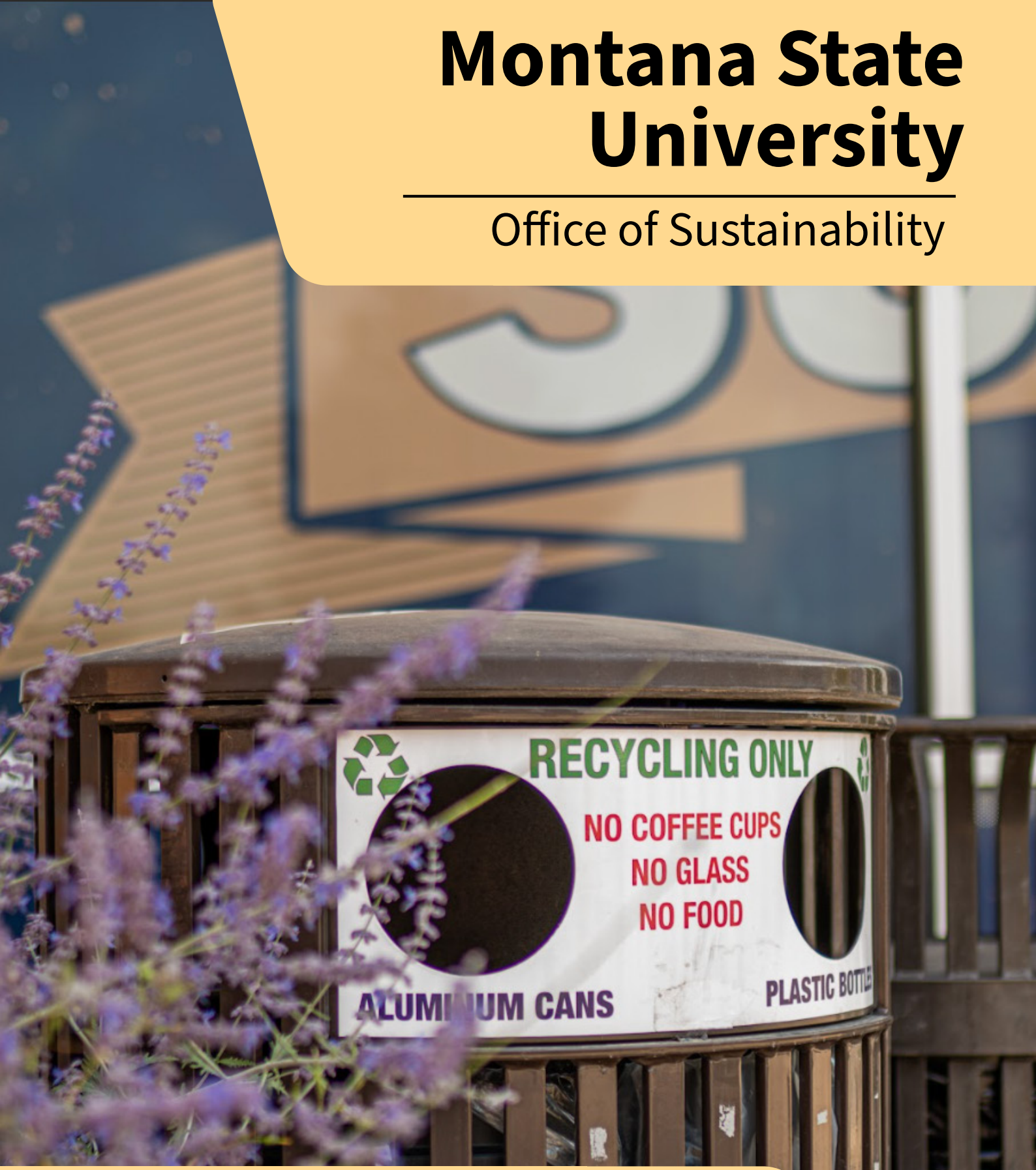
Montana State University

Office of Sustainability



Fiscal Year 2025

Zero Waste Report

MONTANA STATE UNIVERSITY
Mountains & Minds

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Introduction

This Annual Sustainability Report for Fiscal Year(FY) 2025 covers Montana State University activities from the beginning of July 2024 to the end of June 2025. It is grounded in MSU's Campus Sustainability Framework, which integrates climate action, resource efficiency, and circular materials management into university operations. A core pillar of this framework is Zero Waste, which emphasizes preventing waste first, then prioritizing reuse, repair, donation, and organics management, with landfill disposal as a last resort. The report uses standardized definitions and transparent accounting of material flows—tracking diversion as the share of total managed materials—to provide a clear, consistent basis for understanding performance over time.

This section establishes the context and scope for the detailed chapters that follow, outlining how Zero Waste supports the broader sustainability vision while aligning with academic mission, operational excellence, and fiscal stewardship. Subsequent sections present the programs, metrics, and results associated with this framework.

Recycling History at Montana State University

Montana State University has been monitoring its waste diversion rate since 2009. The recycling program began as a student led project in 2008 which led to the first diversion rate for the University reaching 2.69 percent. Composting followed the same track as a student project beginning in 2010 with 30,000 pounds composted in their first year. Founded in 2012 through student advocacy, MSU's Office of Sustainability promotes campus progress and stewardship and strives to advance our land-grant mission.

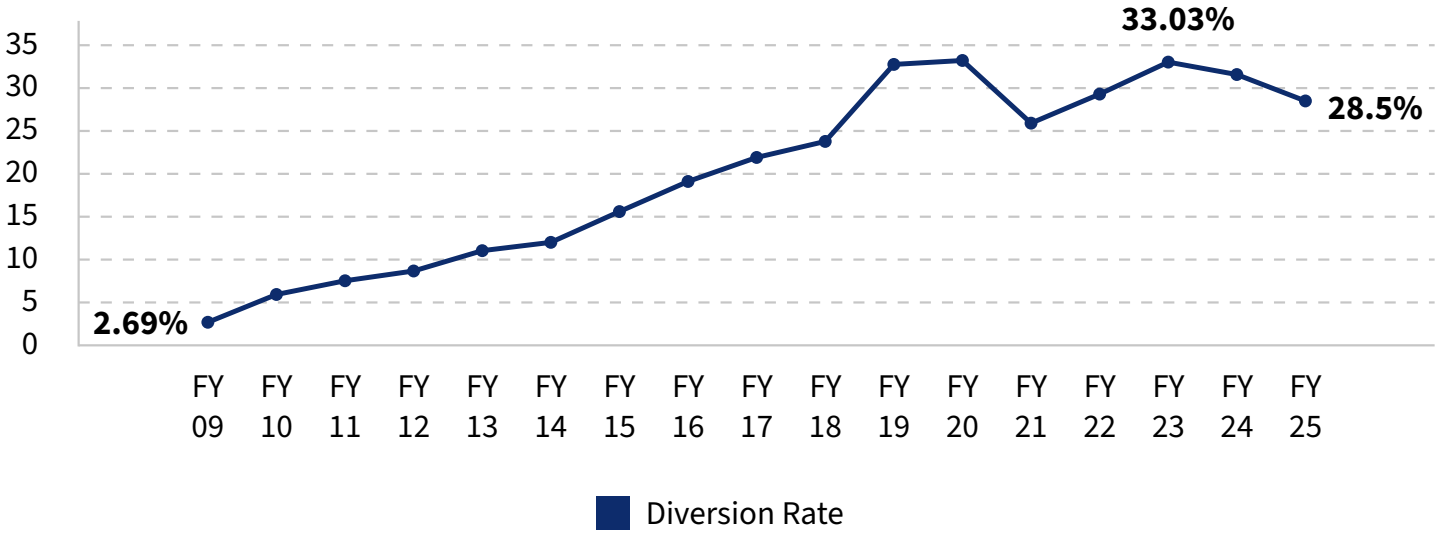
Facilities Services at Montana State University has worked diligently to increase available recycling infrastructure across campus. Their years of effort and hard work have led to the university's diversion rate steadily increasing from 2.69% in FY 2009 to 33.03% in FY 2023. Currently, the diversion rate for FY 2025 is 28.5%. In 2021, as part of the Campus Sustainability Framework, MSU committed to becoming a Zero Waste Campus (minimum 90% diversion rate) by 2035. In July of 2025, MSU hired their first ever Zero Waste Coordinator to further efforts through increased outreach, programing, and data collection.

$$\frac{\text{Compost Totals} + \text{Recycling Totals}}{\text{All Waste Totals (Recycling, Compost, \& Trash)}} = \text{Diversion Rate}$$

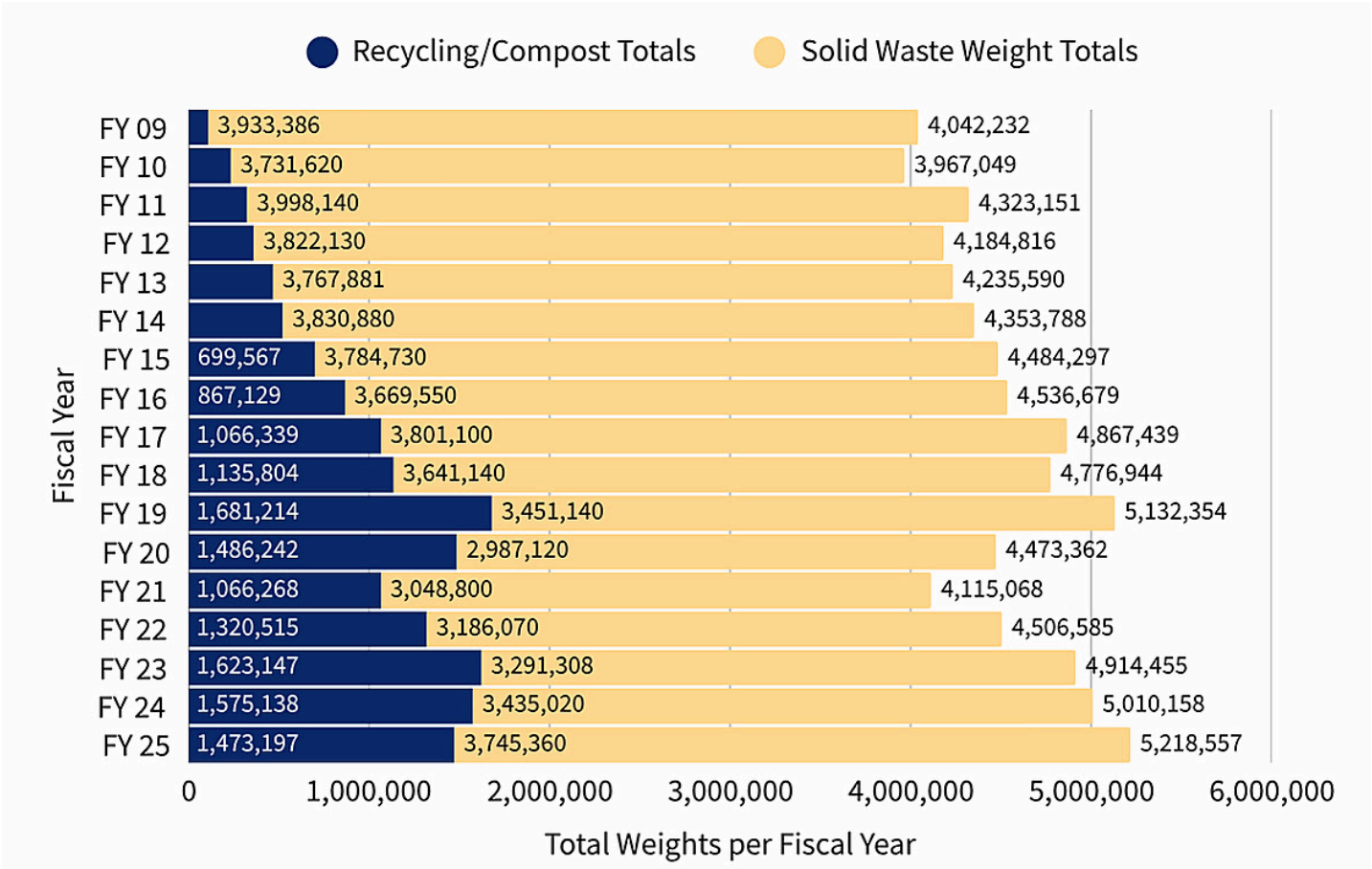
Diversion rate is the percentage of waste that is kept out of the trash stream and instead goes to composting or recycling. It is calculated by adding the total weight of material sent to compost and the total weight of material sent to recycling, then dividing that sum by the total weight of all waste generated (compost, recycling, and trash combined).

Diversion Rate Snapshot FY 09-25

MSU's diversion rate was **28.5% in FY2025**. The decrease from **33.03%** in **FY2023** aligned with a vacancy in the Recycling Coordinator role, which reduced program capacity and outreach. With a Zero Waste Coordinator hired in August 2025, MSU expects to regain momentum in FY2026 by restoring regular education, tightening collection practices, and strengthening compost and recycling operations.



The data below shows, for each year since FY 2009, how much solid waste was generated on campus compared to the total amount of compost and recycling in **pounds**.



Categories of Waste at MSU

MSU measures waste in three designated waste streams: recycling, compost, trash. There are specific partners and facilities that manage the collected materials. Recycling is sent to **Four Corners Recycling, Pacific Steel & Recycling, and the City of Bozeman's Recycling Program**. Compost is managed by **Happy Trash Can,** and landfill waste is transported to **Logan Landfill.**

Compost	Recycling	Trash
• Food waste • Compostable takeout containers, utensils, cups, etc	• Paper and cardboard • Metals and aluminum • Recyclable takeout containers • Plastic bottles • Type 1 and 2 plastic • E-waste	• Non recyclable/ compostable takeout containers • Film plastics & styrofoam • Glass • All other trash items

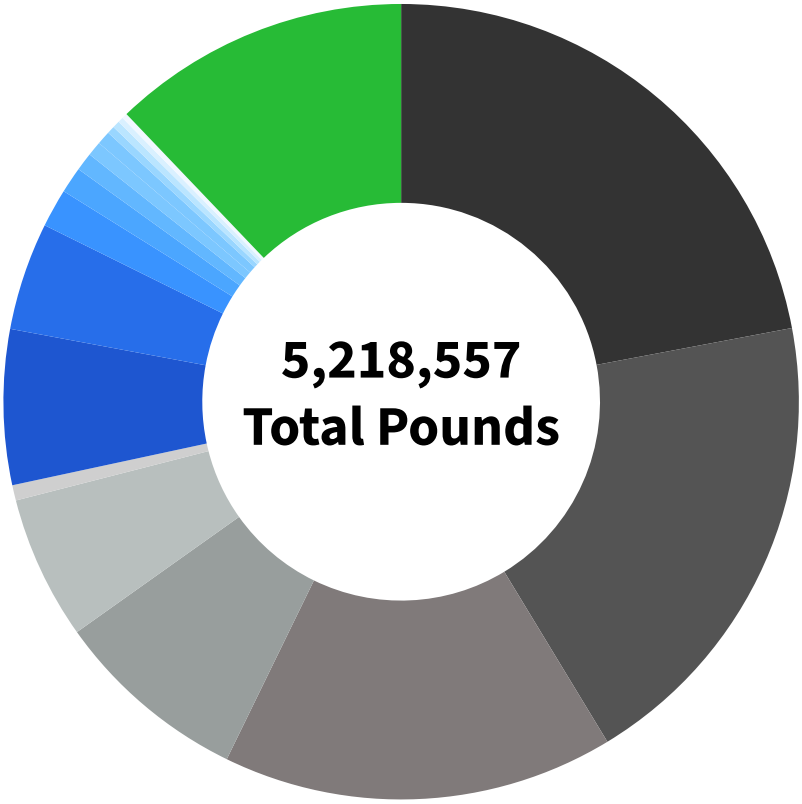
Fiscal Year 2025 Diversion Rate

Trash (71.8%) **Recycling (16.3%)** **Compost (12.2%)**

During FY 2025, Montana State University generated 5,274,380 pounds of total waste across all streams: **634,443 pounds composted (12.2%)**, **838,764 pounds recycled (16.3%)**, and **3,745,360 pounds landfilled (71.8%)**.

To better understand how much waste each campus member generates, the Office of Sustainability used data from MSU's Data & Analytics office to calculate full-time-equivalent (FTE) campus members. An FTE combines the hours of full- and part-time students, faculty, and staff into one "full-time" unit. In FY 2025, waste per FTE was **273.2 pounds**—a **2.6-pound decrease** from FY 2024 (**275.8 pounds per FTE**).

Fiscal Year 2025 Complete Waste Breakdown



- Trash - Residence & Dining Halls (22%)
- Trash - Academic Buildings (19.3%)
- Trash - Univseristy Student Housing (15.9%)
- Trash - Union Building (7.9%)
- Trash - Sports Complexes (5.9%)
- Trash - Misc (0.6%)
- Recycling - Cardboard (6.3%)
- Recycling - Scrap Metal (4.4%)
- Recycling - Family Grad Housing (1.6%)
- Recycling - Mixed Paper (1.1%)
- Recycling - E-Waste (0.7%)
- Recycling - Residence Hall (0.6%)
- Recycling - Clean Wood (0.6%)
- Recycling - Plastic (0.3%)
- Recycling - Mixed Can (0.3%)
- Recycling - Stadium & Field House (0.3%)
- Compost (12.2%)

As MSU's first Zero Waste annual report, this document plays an important role in clearly outlining both *the data and its limitations.* Tracking improvements in the diversion rate increase the ability to **pinpoint the campus areas with the greatest potential for impact.**

Results show that the largest amounts of landfill material came from:

- Residence & Dining Halls **(1,147,819 lbs)**
- University Student Housing **(828,421 lbs)**
- Academic Buildings **(1,004,817 lbs)**.

Because these are the most heavily used spaces for daily living and learning**, they represent key areas for targeted strategies to reduce overall landfill waste.**

Campus recycling data is not yet available at the same level of detail as trash, but it can be viewed by material type with the highest totals from:

- Cardboard **(329,500 lbs)**
- Scrap materials **(229,087 lbs)**
- Family & Graduate **(81,610 lbs)**

Football Stadium recycling totaled 11,580 lbs, averaging about 1,286 lbs per home game. Together, these figures point to the main opportunities for improving recycling across campus.

**A scaling factor of 1.395 was used to align values to actual landfill scale totals.*

Looking Forward as a Community

Montana State University's updated Zero Waste strategy re-frames the goal as a campus-wide community initiative—every student, staff member, faculty member, and partner has a direct role. It rests on three connected pillars: **Upstream Waste Management, Culture Shift, and Landfill Diversion.**

The Office of Sustainability will work with academic departments, auxiliaries, athletics, dining, and student groups to run projects and outreach that prevent waste at the source, make reuse routine, and improve recycling and composting systems. A more unified purchasing system and shared waste-tracking data, supported by ongoing efforts will help curb overbuying, reduce contamination, and make collection more efficient.

Over time, these systems create a **continuous-improvement loop.** Data from waste tracking and pilot projects will be used to identify problem areas, test solutions, and adjust strategies each year. Successful approaches can then be scaled across campus, ensuring MSU keeps moving steadily towards its Zero Waste goal.

Upstream Waste Management

Culture Shift

Landfill Diversion

Strategies for Achieving Zero Waste by 2035

MSU is making zero waste a core part of campus culture through coordinated action. These strategies will guide future projects and ensure transparency, with progress reports documenting year-over-year results and implementation as sustainable choices become second nature.

Strategy 1: Increased Outreach, Education, and Visibility	**Strategy 2: Centralized Data Tracking**
Increase zero waste awareness by informing campus, strengthening communication about projects, and promoting accessible opportunities to engage in sustainable practices across the MSU community.	Enhance all diversion tracking by improving data systems and providing consistent, quantitative feedback to campus partners on a monthly and annual basis.
Strategy 3: Support Student Interns & Projects	**Strategy 4: Supporting Growth of Infrastructure Across Campus**
Support student-led zero waste initiatives, events, and volunteer opportunities that foster hands-on learning, active collaboration, and a culture of sustainability across campus.	Support campus-wide zero waste infrastructure development and growth, including offices, multi-stream stations, composting, and facilities, to increase diversion and embed sustainable practices.
Strategy 5: Supporting Sustainable Purchasing	**Strategy 6: Support Campus Collaboration to Achieve Zero Waste**
Promote upstream waste reduction by prioritizing reusable, recyclable, and compostable purchases, and implementing campus-wide buy-back, repair, and reuse programs with clear participation.	Foster cross-campus collaboration to implement consistent zero-waste procedures, align departments and students, and make the sustainable choice easy, habitual, and second nature.