

Waste Chapter

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Campus Sustainability Planning Studio

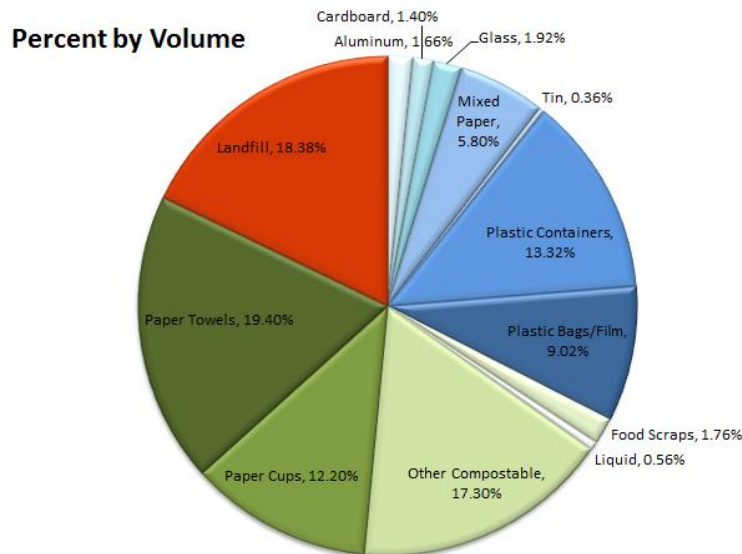
Fall 2014

(* means refer to Appendix)

BACKGROUND

Western's Recycling Center was incorporated by Associated Students (AS) in 1976 after a group of Huxley students and the University General Stores teamed together to collect campus recyclables in an effort to reduce the institution's waste production and environmental impact. In collaboration With Central Stores and Facilities Management, the AS Recycling Center is now diverting about 850,000 pounds of recyclable material from landfill each year. With approximately 15,000 students enrolled at Western, cooperation and communication between all groups on campus is an important element in reducing material sent to the landfill.

Western's Office of Sustainability and Facilities management are committed to eliminating all recyclable and compostable waste from Western's waste stream*. Zero Waste* Western is a campaign that is dedicated to reducing the campus' landfill waste production to zero by providing education and opportunities for students, faculty, and staff to reduce their waste production. Western currently diverts 72% of all containers, paper, and cardboard from the landfill and continues to work to reach that goal of 100%. We worked with our stakeholders and used the results from our student survey in Red Square to help create our waste chapter. Western is on it's way to becoming a Zero Waste institution and this chapter addresses how we can further our efforts.



<http://www.wvu.edu/sustain/progress/indicators/>

AREA UPDATES

- **Residents' Resource Awareness Program (ResRAP)*:** Working through the Office of Sustainability, this program started in 2007 in dedication to reducing Western's resource consumption and waste production. Eco Reps* are peer educators and leaders for residence halls that are trained on different aspects of sustainability.
- **Green Energy Fee (GEF) Grant Program*:** The GEF is a quarterly fee paid by Western students to reduce the campus' environmental impact and raise awareness. The GEF Grant Program provides funding to student-driven projects that engage the campus community in reducing the overall environmental impact.
- **Waste Audits*:** The Air and Waste Management Association (AWMA), the AS Recycling Center, and the Office of Sustainability began conducting waste audits in 2009 to support Zero Waste Western.
- **Dumpster monitoring:** *Is this still happening?? "OS staff monitors campus dumpster levels and dumpster content on a weekly basis. Waste audits and dumpster level data provide Western with information to improve the existing the recycling system and hone education strategies. Success is measured by overall reductions in recyclables processing and landfill waste by weight."*
- **Go for the Green:** ResRAP puts on a friendly competition between all residence halls on campus to see which hall can reduce the most waste, water, electricity, and natural gas.
- **Paper towel recycling pilot program:** In 2012, the Green Energy Fee Program supported a 6-month pilot program to compost paper towels in Haggard Hall but was not as successful as hoped for. Interviews with various stakeholders suggest more education and follow-up studies could make this program successful.
- **Bottled-water free initiative:** In the Spring of 2014, Western ended the sale and distribution of bottled water on campus following a student initiative that started in 2012.
- **Water bottle refill station:** In 2012, the Green Energy Fee Program supported the installation of 3 water bottle refill stations that monitors the number of 20 ounce plastic water bottles saved by their use. In 2013, the GEF Program supported the installation of one more station for Wilson Library.
- **Western Sustainable Office Certification:** A participatory certification program designed for administrative and office working groups to monitor and improve their daily practices that reduce waste and energy. Offices are recognized for their levels of achievement in a point-value rating system.
- **Viking Supported Agriculture?**
- **Electronics Recycling:** Western is partnered with a number of vendors who recycle electronics and rechargeable batteries under an e-Stewards certification, the highest e-waste recycling certification in the world.
- **WWU Move-Out Madness:** The end of every school year Western and the City of Bellingham collaborate to sponsor the event in neighborhoods near the University. The neighborhoods have high student populations, such as Sehome, York, South Hill, Samish and Happy Valley. There's a collection spot in each neighborhood where students can bring their reusable household items, recyclable materials, and landfill items for collection and disposal for free.
- **Landfill Waste Profile Signs:** These signs are posted in each major academic building (except Parks, Biology, Old Main and Humanities) and have specific to each building with statistics. This statistics were provided by the Huxley Chapter of the Air and Waste Management Association.
- **20% Real Food by the end of 2012:** The Dining Services at Western has been striving to reach 20% Real Food by the end of 2012. "Real Food" is food that meets one or more of these criteria: locally-produced, organically grown, fairly traded, and humanely raised.
- **Zero Waste Western:** It's a campaign to reduce Western's landfill waste production to zero. Currently our campus diverts 72% of all containers, paper, and cardboard from the landfill through the AS REcycle

Center. With collaboration with the As Recycling Center, Dining Services, Facilities Management, and the Office of Sustainability, Western is striving to reach Zero Waste in the coming years.

- **Waste Bin Signs:** These signs are up in the classrooms of Academic Instructional Center and Artzen Hall. The purpose of these signs is to remind users of the building to sort their trash properly. The signs were designed by Shayne Smith, Office of Sustainability Webmaster & Media Manager.

KEY PERFORMANCE INDICATORS*

<i>Key Performance Indicator(s)</i>	<i>Status</i>	<i>Interim Target</i>	<i>Target Date</i>	<i>Reporting Unit(s)</i>	<i>Annual Reporting Month</i>
Total volume of campus landfill		20% reduction from FY 14 levels	Fall quarter 2016	Office of Sustainability	
Annual landfill volume per FTE student		20% reduction from FY14 levels	Fall quarter 2016	Office of Sustainability	
Percentage organic waste in landfill dumpsters		20% reduction from FY14 levels	Fall quarter 2016	Office of Sustainability	
Percentage incoming freshmen reached with recycling education		90% freshmen reached regarding recycling education	Fall quarter 2015	Office of Sustainability	
Total volume of landfill, recycling, and organic waste		20% reduction from FY 14 levels	Fall quarter 2016	Office of Sustainability	

Additional KPI's:

- Total diversion rate
- Financial accounts of waste disposal costs & Landfill Tax over time
- Waste weight per building/function (ex: residents, student life, classrooms)
- % of employees trained in waste management
- Total landfill weight
- % recyclables in landfill
- % compost in landfill
- % of packaging that's recyclable
- Number of hours spent by grounds on picking up trash
- Compost rate
- Hazardous waste production
- Amount of liners used for trash bins
- Weights of materials used on construction sites
- Net avoidable disposal cost & rate
- Amount of material waste as a proportion of amount of materials/products purchased
- Materials moved to landfill, reused, composted and recycled by value/tonnage
- % of recyclable by value (of total material value)

STAKEHOLDERS

<i>Person/Group</i>	<i>Title</i>	<i>Unit</i>	<i>Division</i>	<i>Plan Approved (Date/Signature)</i>
John Furman	Director, Facilities Management (<i>Chapter Lead</i>)	Facilities Management	BFA	
Richard <u>Never</u>	Recycle Center Manager (<i>Chapter Lead</i>)	Recycle Center	ESS	
Don <u>Bakkensen</u>	Building Services Manager	Facilities Management	BFA	
Pete <u>Lockheart</u>	Asst. Director Facility Management., WKRC	Wade King Rec. Center	ESS	
John Purdie	Associate Director	Residence Life	ESS	
Zach <u>Dugovich</u>	AS VP of Student Life	Associated Students	ESS	
Randy Godfrey	Grounds/nursery specialist	Facilities Management	BFA	
Gary Hodge	Maintenance Specialist	Facilities Management	BFA	
Maddie <u>Gavigan</u>	<u>ResRAP</u> Program Coordinator/Air and Waste Management Association	Office of Sustainability	OS/AS	
Mike Smith	Custodian	Facilities Management	BFA	
Sue Sullivan	Director of Health and Safety	Health and Safety	BFA	
Patrick <u>Durgan</u>	Executive Chef	Dining Services	ESS	
Greg McBride	Assistant Director of VU Facilities	Associated Students	ESS	
Charlie Ayers	Zero Waste Coordinator	Office of Sustainability	OS	
Dave Ruble	University Residences Facilities Manager	University Residences	ESS	
Rodd <u>Pemble</u>	Recycling Manager for Sanitary Services Corp.	External stakeholder	N/A	

ACTION ITEMS

<i>Achievability via:</i>	<i>Potential Actions</i>	<i>Lead Division</i>	<i>Completion Date</i>
Available Resources (no additional funds needed)	Incorporate active recycling education into freshman orientation to reach incoming students.	Enrollment and Student Services	September 2015
	Begin quarterly "Waste Weeks" where retail food staff educate buyers on how to recycle their containers, have clearly labeled containers marked for sorting, and volunteer waste sorters to educate waste station users.	VP Business and Financial Affairs	Apr. 2015
	Campaign on consumerism choices and its effects on campus' waste stream.	Associated Students/Office of Sustainability	September 2015
Additional Resources (\$0-\$100,000)	Create improved uniform signage across all recycling bins, sorting stations, and landfill containers.	VP Business and Financial Affairs	Jan. 2016
	Compost paper towels in all campus bathrooms.	VP Business and Financial Affairs	Jan. 2016
	All food packaging should be recyclable or compostable.	Enrollment and Student Services	Jan. 2016
	Implement cigarette butt litter campaign to educate on the amount of litter produced and the need for improved smoking stations.	Associated Students/Office of Sustainability	September 2015
Institutional Investment (\$100k-\$1m)	Install uniform 4-part sorting depots indoors and outdoors across campus	VP Business and Financial Affairs	Sept. 2016
Policy Change	None	None	None

GOALS, OBJECTIVES, & STRATEGIES

- **Goal 1: To Educate and get more involvement from student, faculty and staff.**
One of the most common suggestions from interviewees was the importance of involving all stakeholders and continuing education efforts (Group, Mike Smith, Gary Hodge, Randy Godfrey, Maddie Gavigan, Patrick Durgan, Richard Neyer, David Rubel and Pete Lockheart).
 - **Objective 1.1: Create opportunities for the campus community to learn and understand what environmental sustainability is and the magnitude of waste produced on campus.**
 - **Strategy 1.1.1: Have student representatives give a 5 minute presentation on campus sustainability to students once a quarter with updated information and building specific information (Group).**
 - **Strategy 1.1.2: Incorporate waste education presentation to all students at each quarter's New Student Orientation and Summer Start.**
 - **Strategy 1.1.3: Conduct mandatory meetings for residents in the dorms with EcoReps and RA's regarding waste reduction and sustainability.**
 - **Strategy 1.1.4: Implement a program to have faculty to encompass waste management and reduction into lessons.**
 - **Strategy 1.1.5: Work with design students and send monthly e-newsletters to all students, faculty, and staff regarding waste topics (may include other campus sustainability issues). (Include examples; waste audits, events...)**
 - **Strategy 1.1.6: Implement annual campaigns with a standardized design that can be reused (Maddie Gavigan).**

- **Objective 1.2: Improve signage across the campus.**
 - **Strategy 1.2.1: Increase 3-dimensional signage* around sorting depots in all eating areas. (Maddie Gavigan)**
Three-dimensional signs are used over sorting depots as a physical representation on what should be put in each bin. Three-dimensional signs over sorting receptacles have proven to be very effective. (Patrick Durgan; Executive Chef).
 - **Strategy 1.2.2: Work with design students to improve uniform, comprehensive signage on campus.**
- **Objective 1.3: Provide students, staff, and faculty with more opportunities to take action in waste reduction and environmental stewardship.**
 - **Strategy 1.3.1: Create new and exciting events to engage campus community in taking action on waste reduction. For example, create an event to deposit plastic bottles into Red Square fountain.**
 - **Strategy 1.3.2: Move waste audits from Carver Gym to Red Square to increase student awareness.**
 - **Strategy 1.3.3: Create uniform sorting depots across campus indoors and outdoors. (Gary Hodge).**
 - **Strategy 1.3.4: Increase student involvement with the Green Energy Fee program.**

Many new and unique technologies could be utilized on Western's campus to reduce overall waste production that are not getting much attention.

 - **Strategy 1.3.4: Create opportunities for volunteers to help people sort their waste. (Have volunteers stand by bins to ensure waste is properly sorted.)**
- **Objective 1.4: Improve outdoor waste depots. (Richard Neyer).**
 - **Strategy 1.4.1: Create new printed and laminated signage with of pictures of actual waste for outdoor sorting depots that can withstand harsh weather conditions. (Maddie Gavigan).**
 - **Strategy 1.4.2: Improve design at outdoor sorting depots; specifically at Buchanan Towers. (Pete Lockheart).**
There have been past issues with wind and pests destroying depots (Maddie Gavigan).
 - **Strategy 1.4.3: Increase the amount of outdoor sorting stations in high traffic areas. (for example in red square, near the VU, etc.)**
 - **Strategy 1.4.4: Reduce the amount of stand alone landfill bins with a long term goal of eliminating all stand alone landfill bins.**
- **Objective 1.5: Improve communication between staff, faculty, and students.**
Due to the lack of collaboration between students, faculty, and staff, there is a need for improvement in communication and cooperation. (Greg McBride)
 - **Strategy 1.5.1: Create a group that includes students, faculty, and staff to meet regularly and provide outreach to the public by discussing waste reduction topics. This committee would include representatives from each department, such as grounds and custodial services, dining services, AS, etc.**
 - **Strategy 1.5.2: Conduct regular public forums regarding waste reduction with the participation of the committee along with an open comment period following the forum that will also be available online.**
- **Goal 2: Increase use of local and sustainable products.**

Working closely with local businesses can reduce packaging and indirect waste costs.

- **Objective 2.1: Reduce the purchasing of non-recyclable/non-compostable packaged goods.**
 - **Strategy 2.1.1: Increase the purchasing of bulk foods.**
 - **Strategy 2.1.2: Collaborate with food vendors to change plastic “clamshell” sandwich packaging to a form that can be recycled. (Maddie Gavigan)**
 - **Strategy 2.1.3: Increase the signs around sorting depots that educates the public on recycling classifications (specifically plastics).
*Simple and visual designs are most ideal to catch attention of students, staff, and faculty.***
 - **Strategy 2.1.4: Implement a plastic bag taxation for the food vendors on campus.**
 - **Strategy 2.1.5: Promote the use of reusable cups and utensils.**
 - **Strategy 2.1.6: Increase investments on green technology and sophisticated machines, compactor and containers (Richard Neyer).**
 - **Strategy 2.1.7: Work with businesses that operate on campus to sell more sustainable products and packaging.**
 - **Strategy 2.1.8: Collaborate with on campus franchise stores to ask if customer want disposable packaging. (For example, Subway asks customers if they want a bag.)**
 - **Strategy 2.1.9: Collaborate with campus franchise stores to implement a bag tax.**
 - **Strategy 2.1.10: Collaborate with Zoe’s Bagelry to make compostable wrappers the default packaging and students can ask for a thermal wrap.**
 - **Strategy 2.1.11: Research further into the best plastics to buy for downstream recycling.**
- **Objective 2.2: Give priority to local and sustainable businesses.**

Working closely with local businesses can reduce packaging and indirect waste costs (Group).

 - **Strategy 2.2.1: Purchase goods that are considered sustainable under a predetermined set of requirements.**
 - **Strategy 2.2.2: Define all sustainability terms.**

****Took out strategy regarding local food carts**

The term “sustainable” can often be confusing and misleading. It will help in decision making to know and understand how this term fits into waste management and reduction. These terms include: sustainable, recyclable, compostable, local, real food, etc. (Group).
- **Goal 3: Divert waste from landfill and reduce overall waste production**
 - **Objective 3.1: Increase the amount of composting on campus.**
 - **Strategy 3.1.1: Create compost bins for paper towels in all bathrooms. (and send to SSC- waste hauler Sanitary Service)**

There has been a pilot project in the past, but not enough has been done to keep the program going long-term.
 - **Strategy 3.1.2: Implement a system to bring paper towels to composting facility at the Physical Plant.**
 - **Strategy 3.1.3: Invest in a new composting bin for the Physical Plant to meet demands of increased compost production.**

- Strategy 3.1.4: Create a new compost engineer position to manage campus composting. (Richard)
 - Strategy 3.1.5: Create an educational campaign for paper towel composting to stress the importance of proper sorting practices, and monitor program for success.
 - Strategy 3.1.7: Increase use of electric hand dryers. (Apply for Green Energy Fee???)
 - Objective 3.2: Ensure waste is being properly diverted by sorting into respective receptacles.
 - Strategy 3.2.1: Create job opportunities or extra credit for students to help collect and sort out the various waste types (*Richard Neyer*).
Staff workers on campus are spending too much of their time and resources dealing with waste that is mostly produced by the student body. Getting students involved can help them understand the magnitude of our campus' wastefulness (Mike Smith).
 - Strategy 3.2.2: Remove personal trashcans from classrooms.
Without trash cans in every room, students, staff, and faculty must use centralized sorting depots to properly dispose of waste (Mike Smith).
 - Strategy 3.2.3: Remove all individual waste containers from campus and replace with sorting depots.
 - Strategy 3.2.4: Remove personal trashcans from offices.
 - Strategy 3.2.5: Purchase side-saddle trash bins for landfill waste in offices.
 - Strategy 3.2.6: Label retail items using color-coded stickers for easy sorting of plastic, landfill, and compost.
 - Strategy 3.2.7: Implement a small fine for those caught littering on campus.
- Goal 4: Improve education efforts for Zero Waste.
Based on the group, a student survey and interviews with campus employees, Zero Waste is commonly misunderstood and disregarded as a realistic possibility. Recyclables and compostables are also considered waste in addition to what is sent to the landfill.
 - Objective 4.1: Make the purpose and goal of “Zero Waste” more clear and understandable.
 - Strategy 4.1.1: Change the language of the goal. For example, the term *waste stream** can be misleading.
 - Strategy 4.1.2: Increase outreach to students, faculty, and staff through campaigns and e-newsletters and emails.
 - Objective 4.2: Continuously monitor data on waste and report to the campus on progress.
 - Strategy 4.2.1: Create graphs and other visuals to be posted to the public.
 - Strategy 4.2.2: Communicate data reports to administration.
- Goal 5: Improve the technology and design regarding waste reduction on campus with focus given to individual buildings (Richard Neyer and Pete Lockheart).
 - Objective 5.1: Implement a waste reduction certification program for Western.
(Create a catchy acronym for this certification program)
Similar to the LEED certification program, a waste certification program would utilize a point-system per building. Based on points earned, buildings will be categorized as certified, silver, gold, and platinum (platinum being the highest rating).

Although Western already has a sustainability certification system for offices on campus, focusing on individual buildings could enhance the efforts in reducing waste production.

- Strategy 5.1.1: Create criteria and a point-value system in regard to waste reduction efforts.
 - Strategy 5.1.2: Have a uniform, standardized design for entire waste management system.
 - Strategy 5.1.3: Create a committee of faculty, staff, and students to oversee waste reduction certification program (include, facilities management, custodians, grounds workers, academic departments, construction workers, contractors, etc.)
 - Strategy 5.1.4: Create a graduate program for students to work on waste reduction committee.
 - Strategy 5.1.5: Create a waste management position in the Office of Sustainability.
 - Strategy 5.1.6: Have ecoreps give a short presentation every quarter to classes on building specific information in waste management and related to certification system.
 - Strategy 5.1.7: Create a pilot program to add a Bigbelly compactor* on campus.
- Goal 6: Reduce the amount of cigarette butt litter on campus.
The issue of cigarette butt litter on campus continues to be an issue and there have not been many efforts to deal with this problem. (Gary Hodge)
 - Objective 6.1: Make smoking stations more noticeable, attractive, and practical.
 - Strategy 6.1.1: Educate students, faculty, and staff of smoking stations by sending e-mails and making posters.
 - Strategy 6.1.2: Create areas with better seating and a smoker's pole (possibly covered). *These stations must be in compliance with fire safety standards and should be placed in non-problematic areas.*
 - Objective 6.2: Create fun and educational campaigns to inform the public the magnitude of cigarette butt litter.
 - Strategy 6.2.1: Make a large, influential poster for red square that displays a map of smoking stations, statistics of smokers, and social and environmental impacts of cigarette butts.
 - Strategy 6.2.2: Utilize existing message boards and electronic message board to convey educational messages.

→ Strategies for the Grounds or Buildings Chapter to address regarding cigarettes:

- Place smoking stations in areas away from crowded spaces and windows, but in areas that are easily accessible and identifiable. At Whatcom Community College covered smoking stations are located all around the campus. They are placed in areas that are not usually occupied by large groups of people and they face away from walkways and buildings.
- Create a partnership between the Office of Sustainability and the Health and Safety Committee. With these two departments working together information can be shared and used to full potential. Some strategies would include:

- **Update smoking policy to include e-cigs. *Though e-cigs do not produce butt litter it is important to include them in the policy because when used by open windows unpleasant odors and consequences may occur. (delete??)***
- **Work on current smoking policies to designate areas and potentially ban smoking on campus**

APPENDIX

1. **ResRAP:** Residents' Resource Awareness Program (ResRAP) is working towards reducing Western's resource consumption through their commitment to training, assisting and advising Eco Reps, who are peer educators and leaders living in the residence halls. They train Eco Reps about sustainability, who then interact with their residents and increase awareness of the changes they can make in their daily lives to reduce their individual consumption. ResRAP wants to expand sustainable education at Western through residence hall and campus wide events, providing resources for supplementing the sustainable practices of residents during their stay on campus and for the rest of their lives.
In addition, the ResRAP's goals include: expanding compost to all of the residence halls; adopting a new pilot program every year; making ResRAP a well-recognized program on campus; and maintaining sustainable living on campus.
**For more information please visit this webpage: <http://www.wvu.edu/sustain/resrap/>*
2. **Eco Reps:** Eco Reps are leaders within their community who work and communicate with the Office of Sustainability and their fellow residents to promote better sustainable living. They attend peer-to-peer sustainability education trainings and expand their knowledge from student club involvement and students government programs. Throughout the year the Eco Reps and ResRAP staff present informational workshops and programs to help teach residents how they can be a part of change and make a difference. Their goal is to have students apply their knowledge and use the resources they have gained from the program and continue to implement those practices even after they leave Western.
After 6 years of running the program, the Eco Reps will be able to gain credit for their work during winter and spring quarter. It's listed as ENV5 449C Seminar class with Seth Vidana and counts as 1 credit. The Eco Reps host events in their residence halls to promote sustainability with education, community involvement, and outreach.
** For more information please visit: <http://www.wvu.edu/sustain/resrap/eco-reps/profiles/>*
3. **Waste stream:** According to the U.S. Environmental Protection Agency (EPA) a waste stream is the "total flow of solid waste from homes, businesses, institutions, and manufacturing plants that is recycled, burned or disposed of in landfill, or segments thereof such as the 'residential waste stream' or the recyclable waste stream(U.S. EPA, 1989)."
**Refer to:*
http://iaspub.epa.gov/sor_internet/registry/termreg/searchandretrieve/termsandacronyms/search.do?search=
4. **Zero Waste:** According to Zero WASTE International Alliance, "Zero Waste Is a goal that is ethical, economical, efficient, and visionary, to guide people in changing their lifestyles and practices to

emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water, or air that are a threat to planetary, human, animal or plant health (ZWIA, 2009).”

*Refer to: <http://zwia.org/standards/zw-definition/>

5. **Key Performance Indicators (KPI's):** KPI's are quantifiable measurements that represents the success and progress towards the goals of an organization. It's also referred to as “key success indicators (KSI).”

* For more information visit:

<http://management.about.com/cs/generalmanagement/a/keyperfindic.htm>

6. **Waste Sorting bins:** These bins are located inside Western's buildings on campus and allow consumers to sort out their waste into the appropriate bins. Each sorting bin station has proper signage to illustrate what goes into which bin to help aid people efficiently. These bins include: mixed paper, compost, landfill, and plastic, glass and aluminum.



7. **Outdoor Waste Depots:** These are located outside each residence hall on campus and are larger than the sorting bins located inside Western's buildings. They include: newspaper, glass, plastic, cans & aluminum, cardboard and landfill.
8. **Bigbelly Compactor:** Bigbelly was founded in 2003 and wanted to make waste collection more efficient and less resource intensive. Their solution was to use renewable solar energy and informative technology. They have helped implement wide-spread public space recycling programs in cities such as Chicago, Boston, and Philadelphia and is now working on public space compostable collection too.

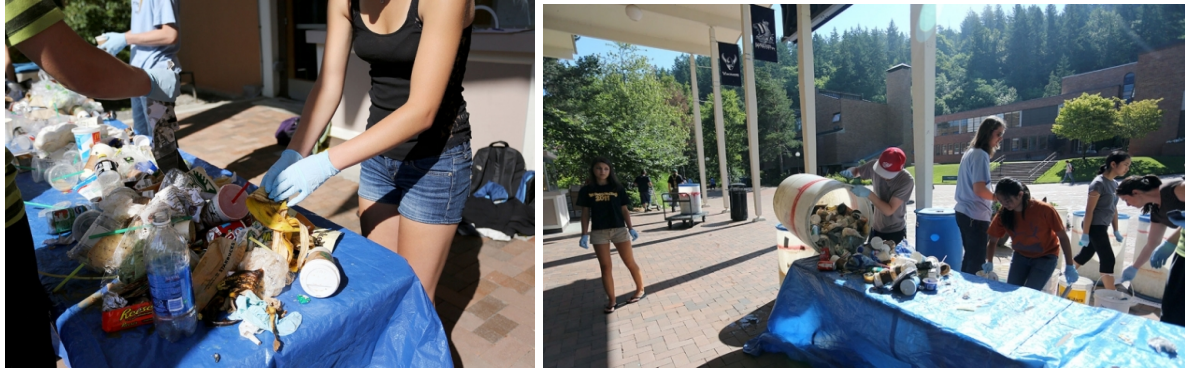


*For more information visit: <http://bigbelly.com/>

9. **3-D signage:** The use of real waste attached to a sign to illustrate to consumers which bin their waste should be sorted into to. This allows people to make quick inferences of where their waste should go. There's a compost, landfill, paper, and bottles bin.



10. **Waste Audits:** The waste audits began Spring 2009 with the collaboration with the WWU Chapter of the Air and Waste Management Association (AWMA), the AS Recycle Center, and the Office of Sustainability. These quarterly waste audits (that occur on campus as seen in the photos below) are conducted to support a Zero Waste WEstern by informing decision making with data characterizing the different types of materials in campus landfill bins. In addition, Academic Custodial Services, and Grounds Maintenance have been partners. The Fall 2011-Spring 2012 Waste Audit & Building Waste Trends by Volume and Mass and Spring 2009 Waste Survey are available online (use second link provided below).



**For more info visit:*

<http://www.onlinefast.org/wwutoday/features/college-quest-students-perform-wwu-waste-audit>

<http://www.wvu.edu/sustain/progress/waste-audits/>

11. **Green Energy Fee Grant Program (GEF):** The GEF is a student-initiated, quarterly fee paid by all Western students to reduce the campus' environmental impact and engage the campus community in the environmental awareness. This grant program provides funding for innovative, student projects that focus on promoting experiential learning opportunities and sustainable practices at Western. This program is managed by the Office of Sustainability and supported by the AS Environmental and Sustainability Programs. Students, staff, and faculty are able to apply for grant funding. The GEF Grant Program strives to increase student involvement and education, reduce the University's environmental impact, and create an aware and engaged campus community.



**For more info visit: <http://www.wvu.edu/sustain/programs/gef/>*