

UNIVERSITY OF OREGON

2014 SUSTAINABILITY ASSESSMENT REPORT

DEPARTMENT OF PHYSICAL EDUCATION & RECREATION

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EXECUTIVE SUMMARY

This is the first UO Department of Physical Education and Recreation (PE & Rec) Sustainability Assessment, and we believe the first comprehensive sustainability inventory of a Division I university recreation program in the country. Spanning 40 indicators, this report provides a snapshot of the Department of Physical Education and Recreation's (PE & Rec) environmental, economic and social impacts. Here are some (but certainly not all) of the highlights of the findings from this report:

- PE & Rec is very successful at recycling its paper waste stream.
- In comparison to other campus units, PE & Rec has a low waste footprint (on a per capita basis).
- Dollars spent on cleaning products increased 24% from 2011-2013. The percentage of green certified cleaning products purchased also increased during that period.
- The department achieved a Silver certification from the 'Green Office' Program in January 2013 for its commitment to: 1) Promoting environmental awareness; 2) Reducing impacts; 3) Measuring Performance; and 4) Adopting best practices.
- No pesticides, herbicides, or fungicides were used on the Riverfront fields between 2010 and 2013.
- PE & Rec dedicated less than one tenth of one percent of its operating budget to energy efficiency improvements.
- PE & Rec staff drive alone to work at a higher rate than other campus staff.
- A lack of building-level meters for electricity and water prevents a detailed understanding of utilities consumption and related opportunities for efficiency improvements.

PRELIMINARY RECOMMENDATIONS

- 1) Install water meters at individual buildings and keep a running record of use and trends.
- 2) Implement internal utilities data monitoring and analysis procedures into appropriate staff responsibilities.
- 3) Invest in covers for new and old pools to reduce water evaporation, water demand for refilling, chemical use, and energy use for heating.
- 4) Integrate PE & Rec buildings into the upcoming UO energy dashboard system.
- 5) Increase recycling rate at turf fields, Gerlinger, and in workout areas by implementing clearly marked side-by-side recycling/trash/compost containers.
- 6) Research usage of bike racks/parking to understand whether or not more is needed.
- 7) Offer training for key PE & Recreation staff on triple bottom line decision-making. UO Purchasing & Contracting Services offers an introductory video within its 'Vendor Portal' online application.
- 8) Build a template for tracking sustainability data each year going forward and assign staff time to keep it updated.
- 9) Work with contractors to encourage tracking and diversion of construction waste throughout Student Recreation Center (SRC) expansion project.
- 10) Use hall/wall space to implement creative awareness-building campaigns to inform students about resource conservation efforts and other important environmental information from other campus departments.
- 11) Establish energy use per square foot goals for all facilities.
- 12) Explore alternatives and/or incentives to help lower the share of staff commuting alone by car (e.g. flex start/end shift times to allow for alternative commuting means).
- 13) Utilize campus expertise in Chemistry and Campus Operations departments around 'green' cleaning supplies and their use.

BACKGROUND

Collegiate athletic and recreation programs across the U.S. are ramping up 'greening' initiatives at their facilities in areas ranging from waste diversion to green building design and resource efficiency retrofits. A survey of 148 colleges and universities administered in June 2013 by the University of Arizona, National Intramural-Recreational Sports Association (NIRSA) and the National Resources Defense Council (NRDC) highlights aspects of those efforts in the 2013 NRDC publication, *Game Changer; How Campus Sport is Going Green*. Highlights from the survey include the following:

Recreation Program's 'Greening Initiatives' Nationwide	UO PE & Rec?
84% have installed recycling bins in public facility spaces	Y
64% have installed bike racks and infrastructure to promote bicycle commuting	Y
58% invested in more energy-efficient practices by upgrading lighting and controls	Y
43% have a purchasing policy prioritizing energy-efficient models for all electronics	N
48% procure greener cleaning products	Y
46% conducted an energy audit	N
32% pursued LEED certifications for new facilities, major renovations, and/or existing facilities	Y
10% have installed onsite solar energy production systems	Y
45% have upgraded to water efficient fixtures	Y

Other notable greening achievements at North American colleges and university recreation departments/facilities include:

- August 2009—the University of California at Irvine Anteater Recreation Center Expansion achieved LEED Gold Certification for new construction, making it the first certified collegiate rec. center.
- August 2010—Student Recreation Center at University of Arizona becomes first-ever LEED Platinum recreation center in the nation.

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ENVIRONMENTAL SUSTAINABILITY INDICATORS

Environmental sustainability relates to the effects of activities and operations on ecosystems and the use of natural resources. The following set of indicators were selected by the department in order to capture a snapshot in time of the environmental impacts of department activities and facilities.

ENV

TONS OF MATERIALS RECYCLED/ COMPOSTED/LANDFILLED

Location

All PE & Rec facilities except Riverfront fields

Source

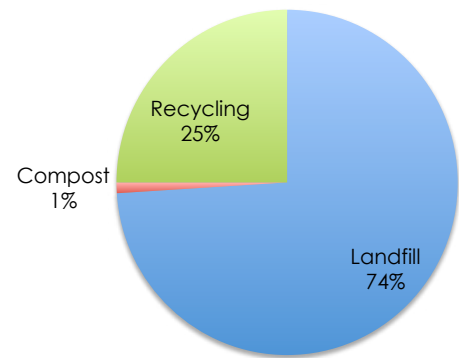
Fall 2013 internal waste audit; Rodney Bloom-Project Lead, PE & Rec

RESULTS

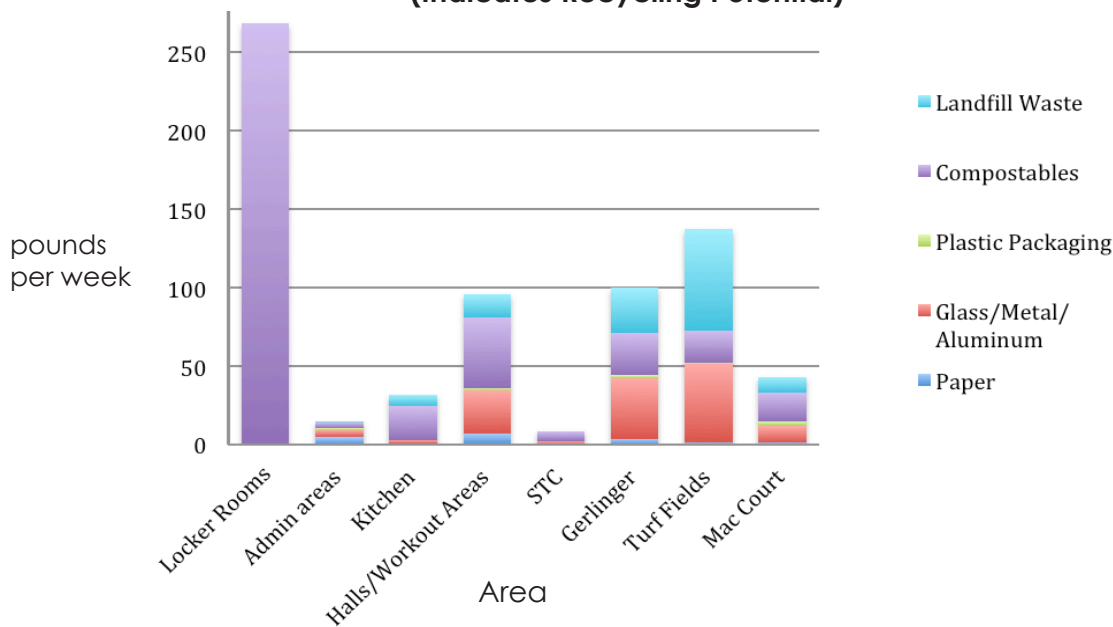
A formal waste audit was performed in November, 2013 to assess the department's waste stream. A summary of results is included below—a comprehensive report is included as Appendix C.

- Total weekly landfill waste:** 677 lbs
- Total weekly recycling:** 238 lbs
- Total estimated yearly landfill waste:** 35,200 lbs (18 tons)
- Total estimated yearly recycling:** 12,380 (6.2 tons)
- Department waste diversion rate:** 25%

All Waste (by weight)



Composition of Material Sent to Landfill by Area (Indicates Recycling Potential)



CONTEXT

The campus-wide waste diversion rate for FY12 was 51%. (Source: Campus Zero Waste)

An average football game at Autzen stadium, with ~55,000 guests produces ~25 tons of waste, of which ~44% is diverted via compost and recycling efforts. (Source: Office of Sustainability)

STAFF RECYCLING HABITS BY TYPE OF WASTE

RESULTS

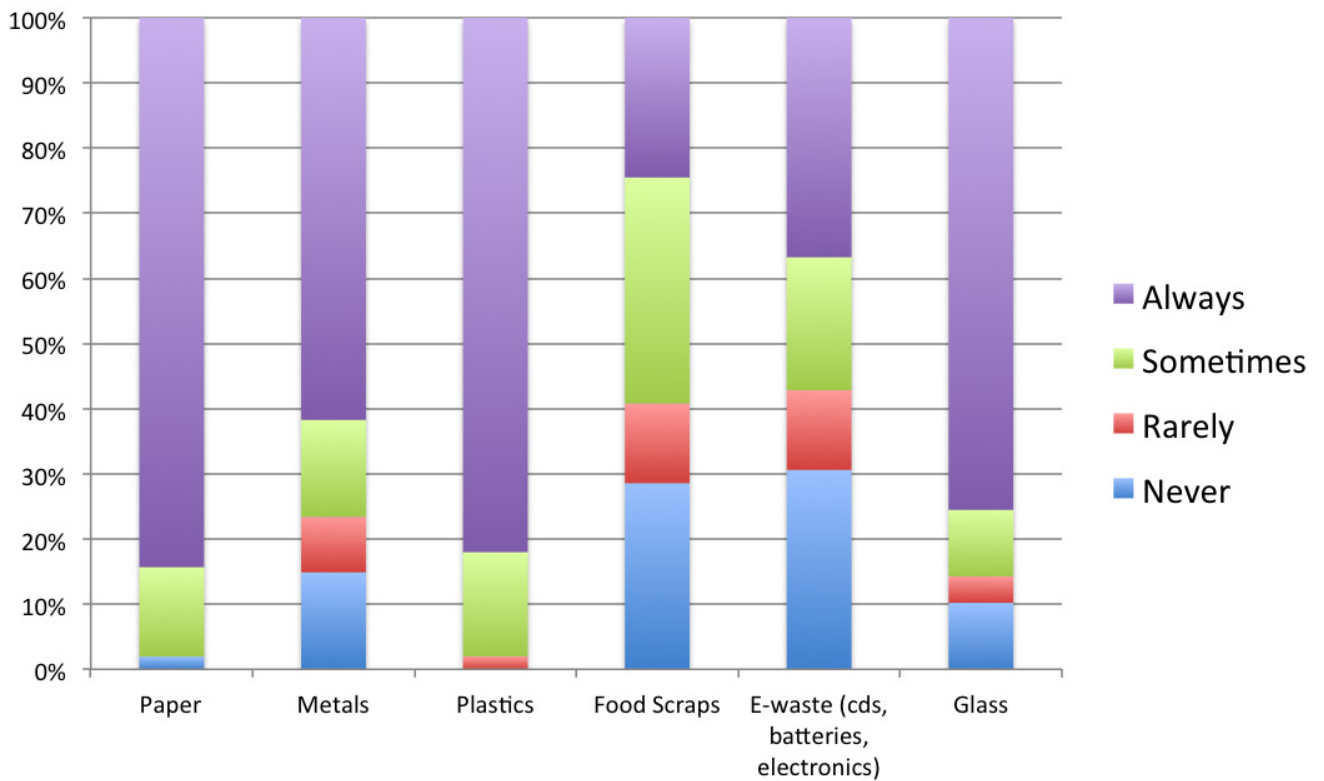
Location

Staff work areas

Source

Summer 2013 Staff & Faculty survey (via Qualtrics)

Question: Do you recycle or compost the following items at work?



CONTEXT

Staff comments for why they rarely or never recycle or compost items:

- “Forget we have compost bins”
- “Don’t want it (compost) to smell”
- “Bin is in an inconvenient location”
- “There is no collection bin that I know of” (e-waste, glass, compost)

FACILITIES SPACE INVENTORY

Location

All facilities

Source

Teri Jones, Campus Operations
Blake Andrew, UO GIS/Infographics Lab

RESULTS

Building	Total square feet	Year Built	SEED compliant?
Indoor			
MacArthur Court	133,416	1928	N/A
Gerlinger	66,468	1921	N/A
Student Recreation Center (SRC)	152,721	1999	Yes
Esslinger	34,027	1936/ 1999	Yes
Indoor Tennis Courts	32,523	2000	Yes
Subtotal Indoor	419,155		
Outdoor			
Turf Field 1	63,667		N/A
Turf Field 2	70,555		N/A
Riverfront Fields	151,915		N/A
Gerlinger Field	50,820		N/A
Outdoor Tennis Courts & Track	62,004		N/A
Howe Extension	47,634		N/A
Subtotal Outdoor	446,595		
Total Combined	865,750		

- Indoor space represents 5.7% of total campus indoor square footage.
- 52% of total indoor building space meets State Energy Efficiency Design (SEED) standards, which went into effect in 1991 with the passage of ORS 276.900-915 into Oregon State law.
- 100% of buildings that should be compliant with SEED are compliant.
- The expansion of the SRC is being built to LEED Gold standards and may possibly qualify for Platinum. This is yet to be determined as of May 2014.
- Also see Appendix A—'PE & REC Space Inventory Map.'

CONTEXT

As of October 2013, 18% (1,327,000 sf) of UO's square footage is LEED certified while 25% (1,844,000 sf) is built to LEED (and SEED) standards according to Campus Real Estate & Planning.

UTILITIES/ENERGY CONSUMPTION

UNITS: KWH & THERMS PER SQ FT

Location

Student Recreation Center (SRC) & Esslinger, Gerlinger, and the Indoor Tennis Center
Fiscal years 2008-2013 (*no 2010)

Source

Teri Jones, Campus Operations

RESULTS

Facility	Year*	Electricity (kWh)	Steam (Klbs)	Natural Gas (therms)	Total Energy (MMBtu)	Total Energy/sf (MMBtu)
SRC & Esslinger total sf: 186,748	2008	1,510,084	3,214	0	10,331	.06
	2009	1,564,003	3,602	0	11,141	.06
	2011	1,571,409	3,588	0	11,143	.06
	2012	1,570,978	4,014	0	11,828	.06
	2013	1,569,289	5,084	0	13,548	.07
Gerlinger total sf: 66,468	2008	219,840	0	3,306	1,175	.018
	2009	306,560	0	3,581	1,403	.021
	2011	267,950	0	4,375	1,351	.020
	2012	257,174	0	4,337	1,310	.020
	2013	210,934	0	3,700	1,234	.018
Indoor Tennis Center total sf: 32,523	2008	230,960	0	0	787	.024
	2009	243,440	0	0	830	.026
	2011	237,280	0	0	809	.025
	2012	290,320	0	0	990	.030
	2013	264,000	0	0	900	.028
All Facilities total sf: 285,739	2008	1,960,884	3,214	3,306	12,293	.043
	2009	2,114,003	3,602	3,581	13,374	.047
	2011	2,076,369	3,588	4,375	13,303	.047
	2012	2,118,472	4,014	4,337	14,128	.049
	2013	2,044,223	5,084	3,700	15,682	.055

*No data available for 2010

- The SRC and Esslinger represent 65% of the total square footage.
- There was a marginal increase at SRC and Esslinger and a marginal decrease at Gerlinger and the Indoor Tennis Courts in energy/square foot.

CONTEXT

Electricity Consumption (Btu) Intensities for All Buildings, 2003 (for comparison)	
Building Type/Activity	Electricity Energy Intensity (MMBtu/sq. ft)
100,000-200,000 sq. ft	.057
Education	.037
Public Assembly	.042

Source: Energy Information Administration- Commercial Buildings Energy Consumption Survey (CBECS)

ENERGY EFFICIENCY UPGRADES

Location

All facilities, 2009-2013

Source

Darle Driscoll, PE & Rec
Sue Weiseke, PE & Rec
Teri Jones, Campus Operations

RESULTS

One energy upgrade was made between 2009-2013:

The 3-court gym (SRC) lighting system was upgraded in September 2010 at a cost of \$8,000 for equipment and installation.

- Ballast system—light sensors allows for 'daylight harvesting' by adjusting indoor lighting to the amount of sun coming in via windows & skylights.
- New light bulbs use 250 watts and have a 10,000 hr. lifespan, as opposed to the old 400-watt bulbs with a 2,000 hr. lifespan. (48% reduction in energy use and 5 times longer lifespan)
- The lighting upgrade has been estimated to save 50,388 kWh/year in electricity.
- Daylight harvesting ballast system is estimated to save around 10,000 kWh/year.
- Total electricity **savings are equal to 3.8% of total electricity use** by the dept. in FY 2013. (60,388kWh/1,569,289 kWh)

Cost savings:

At \$.09/kWh (campus rate) x 60,388 kWh/year (est. energy savings)= \$5,434.92/year

- Savings to date: 3 years x \$5,434 = **\$16,304.76**
- A memorandum of understanding (MOU) with Campus Operations allows the dept. to pay a flat rate for electricity use in both SRC and Esslinger, therefore savings from energy upgrades are realized outside of the dept. budget.

CONTEXT

PE & Rec pays a flat rate of \$24,832.50/fiscal quarter at campus electricity rate of \$.0911/kWh which is equivalent to 1,090,340 kWh/year.

- Actual electricity use: 2,071,336 kWh/year (2008-2013 average)

GREENHOUSE GAS EMISSIONS (ALL)

Location

Department Activities

Source

Teri Jones, Campus Operations
(energy use data)

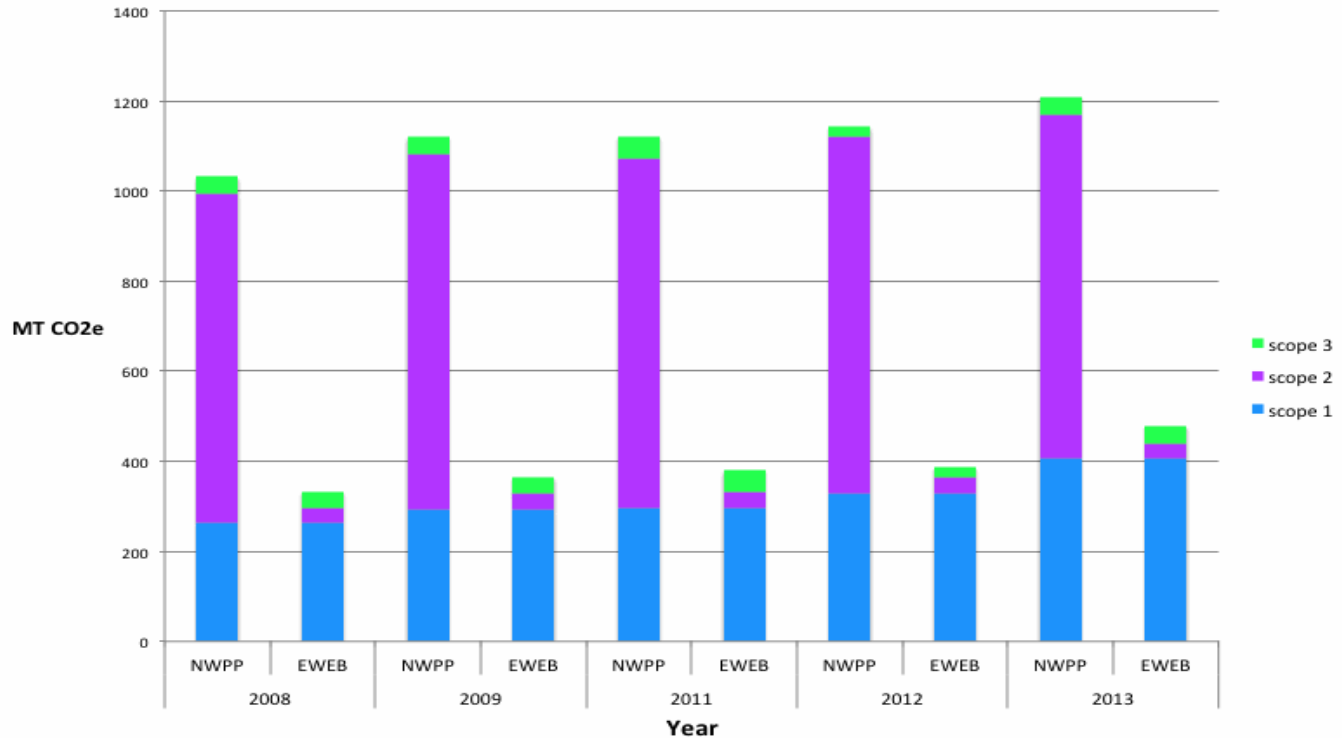
OUS—FY2012 Greenhouse Gas
Inventory of Operations

Cindy Fitzgerald, PE & Rec

Shelley Villalobos, Office of
Sustainability

RESULTS

SCOPES 1-3 GHG EMISSIONS,
2008-2013 IN MTCO_{2e}



Scopes 1-3 GHG Emissions, Dept. of PE & Recreation Activities, 2008-2013* in Metric Tons Carbon Dioxide equivalents** (using both the regional Northwest Power Pool (NWPP) and local EWEB carbon intensity factors)										
	2008		2009		2011		2012		2013	
Scope 1	263		293		297		329		407	
Scope 2	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB
	732	33	790	35	776	34	791	35	764	33
Scope 3	73***		73***		73		47		39	
TOTAL	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB	NWPP	EWEB
	1,068	369	1,156	401	1,146	404	1,167	411	1,210	479

*2010 excluded for lack of utilities data

**MTCO_{2e} is a measurement unit indicating metric tons (MT) of carbon dioxide (CO₂) and equivalent emissions (e).

*** SCOPE 3 data was not collected for 2008 or 2009. As a placeholder, we used the 2011 number.

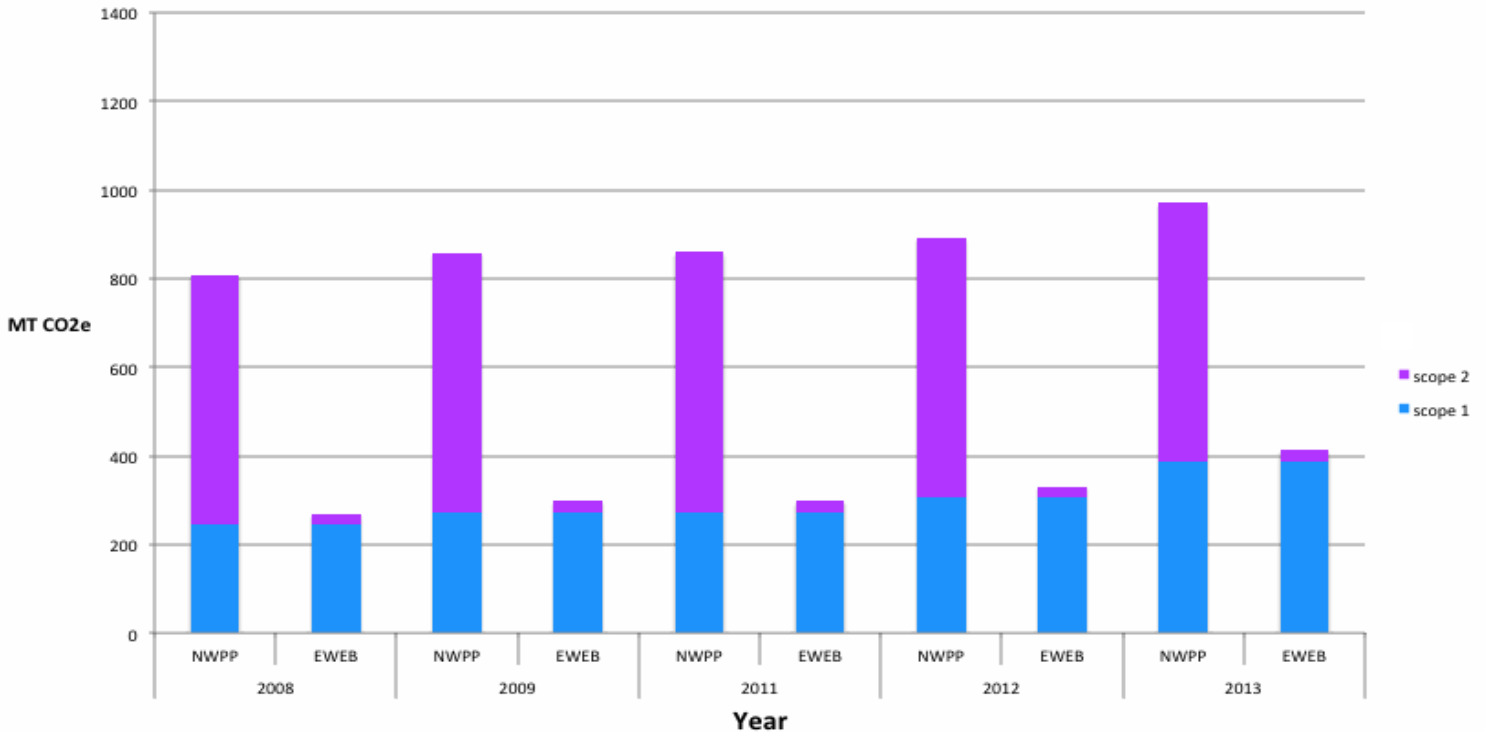
Scope 1	Stationary/on-site (campus) combustion—steam & natural gas
Scope 2	Purchased electricity using NWPP & EWEB carbon intensity factors*
Scope 3	Staff commute and business travel

*The University of Oregon is in the Northwest Power Pool (NWPP) region as determined by the U.S. Environmental Protection Agency. These regions are used to denote the average GHG intensity of electrical power produced in that region. EWEB, the local utility, has a more specific GHG intensity factor which only represents the utilities it produces and is thus more accurate, but less broadly recognized.

GREENHOUSE GAS EMISSIONS (SRC)

RESULTS

STUDENT RECREATION CENTER (SRC) SCOPES 1 & 2 GHG EMISSIONS, 2008-2013 IN MTCO₂e



The combined GHG impacts of Gerlinger and the Student Tennis Center (STC) comprised 9% of the total scope 1 & 2 emissions on average over the five years measured. The other 91% was the SRC, as shown above.

CONTEXT

The total combined UO GHG emissions in 2012 were 93,425 metric tons of carbon dioxide and equivalents (MT CO₂e). At 1,167 MT CO₂e in 2012, **PE & Rec accounted for a total of 1.5% of the campus-wide emissions in 2012.**

SOLAR ELECTRICITY GENERATION

Location

Student Recreation Center

Source

Teri Jones, Campus Operations

RESULTS

A 12 kilowatt solar array was commissioned in 2003, while data collection on electricity generation began in July 2007. The array was paid for by the Associated Students of University of Oregon (ASUO) 'over-realized' funds and coordinated by a student group called the Ecological Design Center. Below is a chart which shows: (i) the rate at which Campus Operations purchased each kWh generated; (ii) the total credit awarded the department based on the energy output and; (iii) the annual output in kWh since 2008.

Year	UO Buyback Rate	Total Credit	Output (kWh)
2008	\$.039	\$2,838.88	13,464
2009	\$.025	\$3,020.82	13,501
2010	\$.025	\$2,786.01	12,437
2011	\$.025	\$2,745.47	12,256
2012	\$.025	\$2,969.70	13,257
2013	\$.025	\$2,067.16	9,228
Total		\$16,428.05	74,143

CONTEXT

The SRC solar array is one of six installations on campus. The other locations are the Erb Memorial Union, the Lillis Business Complex, the Facilities Warehouse, the Outdoor Program Barn, and Pacific Hall.

WATER USE

Location

All facilities

Source

Teri Jones, Campus Operations
Jeff Fryer, Leighton Pool Operator

RESULTS

'No ability to retrieve all the data' —UO Campus Operations

The lack of building-specific water meters prevents obtaining accurate data. Anecdotally, it is known that Leighton Pool in SRC is cleaned and refilled annually. The pool holds 180,000 gallons. It is not covered and therefore an unknown amount of heat, chemicals, and water escape and must be replenished regularly.

CONTEXT

Campus-wide water use in 2009 was 185,076,171 gallons.

USE OF WATER SAVING TECHNOLOGY & UPGRADES

Location

All facilities

Source

Russ Schrantz, PE & Rec
Sue Weiseke, PE & Rec

RESULTS

No investments on water saving upgrades have been made to facilities in recent years. However, four (4) low-flow showerheads were installed in locker room showers in the SRC in 2013 to gather feedback on which type of showerhead users preferred best. The winner will be used in all showers when the locker rooms are renovated during the SRC expansion.

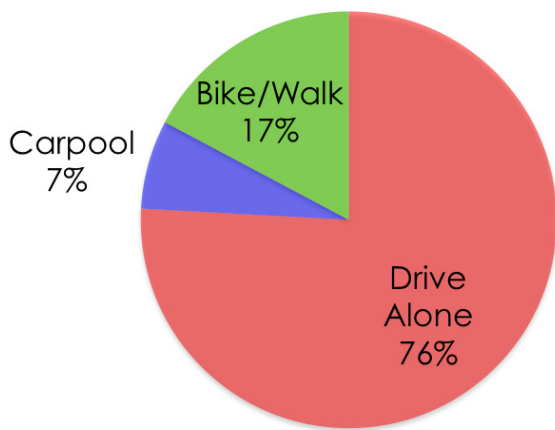
Source

PE & Rec Staff Meeting Survey, June 2014
2012 Campus Commute Survey,
Campus Planning

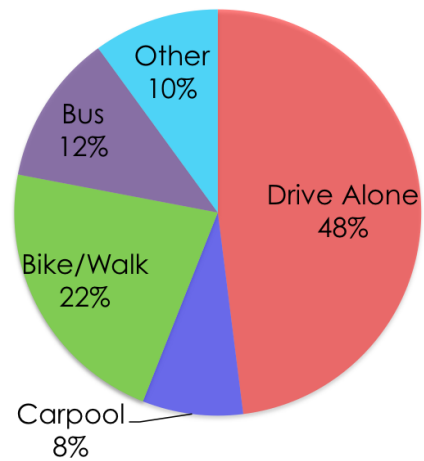
STAFF & USER TRAVEL MODES

RESULTS

PE & Rec Staff
Travel Modes



UO Staff & Faculty
Travel Modes

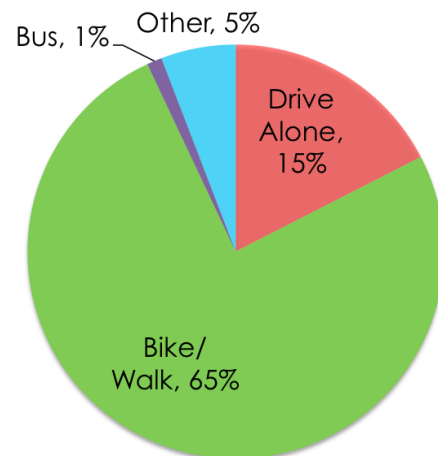


PE & Rec full-time staff drive alone to work at a 25% higher rate than the cumulative average of UO employees.

Staff comments about travel modes:

- “Provide some kind of time-based incentive to bike, walk or bus to work; time is one of the biggest reasons people choose not to use these options.”

Student Travel Modes



AVAILABILITY OF BIKE PARKING

RESULTS

368 total spaces around the perimeters of PE & Rec facilities. Average daily use of SRC was 3,790 visitors/day.

65% of students bike or walk to campus. Currently, there is no way to separate out trips to campus which also include a visit to the SRC.

CONTEXT

There are an estimated 5,222 bike parking spaces on the UO campus proper. Total full-time student enrollment in Fall 2013 was 23,378. If 65% of students bike or walk, that's 15,195. This is equal to one bike parking space per 3 students who bike or walk to campus per day.

Location

All Facilities

Source

Bike Parking Inventory-2013,
Emily Eng, Campus Planning
SRC Usage Data,
Glenn Cashel, PE & Rec

VEHICLE FLEET

RESULTS

The fleet consists of the following **3 vehicles**:

1—2004 Ford Ranger; unleaded gasoline, 19 mpg. "Primary use is to go on runs to pick things up at local businesses"—Russ Schrantz.

2—960-Watt electric golf carts; charged ~3 times per week.

CONTEXT

There were 388 vehicles in the total campus fleet in 2009. Nineteen of them were electric. PE & REC owns 10% of campus electric vehicles.

Location

All Facilities

Source

Russ Schrantz, PE & Rec

CHEMICALS USE, STORAGE & COSTS

Location

All Facilities, FY2011-2013

Source

Deanna Bowden, PE & Rec
Jeremy Chambers, Environmental
Health & Safety

RESULTS

There were 40 unique chemicals identified at facilities through the 2011-2013 Fire Marshall's Inventory. The Environmental Health & Safety reported seeing 'no current issues to be concerned about'. Purchasing information that was available is included. See the list of documented chemicals below:

Product Purchased	Cost (FY2011-2013)
Compressed oxygen	\$14.76
Acetylene	\$43.07
Laquer thinner	no data
T-5 thinner	no data
Rubber & gasket adhesive	no data
Shellac thinner	no data
Water-based paint	\$370.20
Enamel paint	\$216.00
Clear urethane paint	\$120.10
Gasoline	no data
2-stroke gas	no data
Motor oil	no data
Propane	no data
Oxygen bleach	\$8565.50
Fresh laundry break	\$4192
Detergent	\$8430.19
Fabric softener	\$4024.02
Sanitizer	\$91.92

2012 State Fire Marshall's Inventory Chemicals List	
Bleach	Carbon dioxide 100%
Combustible liquids	Toxic solids
Compressed air	Carbon monoxide
Helium 100%	Disinfectant
Irritant liquids	Cleaner
Isopropyl alcohol	Corrosive liquids
Nitrogen 100%	Detergent
Oxygen 100%	Sodium hypochlorite
Sodium hydroxide	Baking soda
Acetic acid	Calcium carbonate
Acetone	Soda ash
Aerosol	Propane
Dimethyl formamide	Glutaraldehyde
Ethyl acetate	Denatured alcohol
Ethyl alcohol	Gasoline
Formic acid	Latex paint
Hydrochloric acid	Cutting oil
Liquid nitrogen	Argon 100%
Norepinephin	Paint thinner
Pentane	Paint remover
Perchloric acid	

CERTIFIED GREEN CLEANING PRODUCTS

Location
All Facilities, FY2011-2013

Time
FY2011-2013

Source
Deanna Bowden, PE & Rec

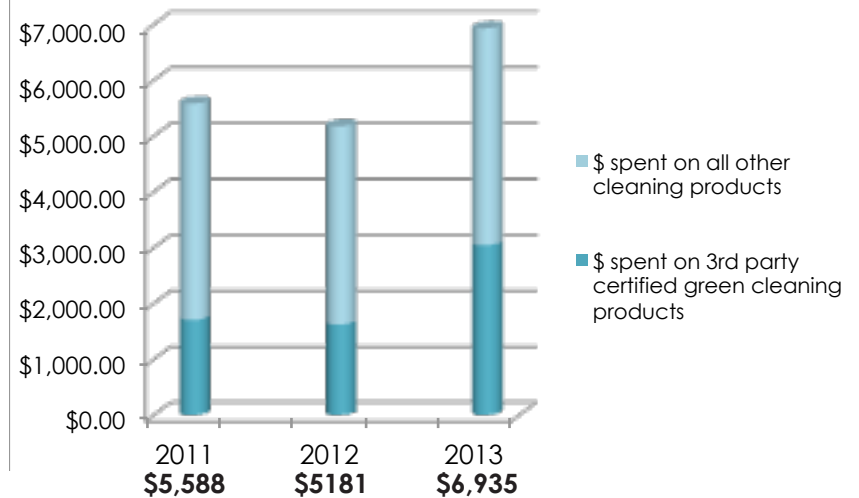
RESULTS

Product**
Simple Green*
Hand Sanitizer*
VirexII Germicidal Cleaner
Neutral Cleaner*
Glass Cleaner
Bleach
Shampoo/body soap
Power cleaner
Expose II germicidal cleaner

* 3rd party certified for environmental safety

**this list does not include laundry supplies

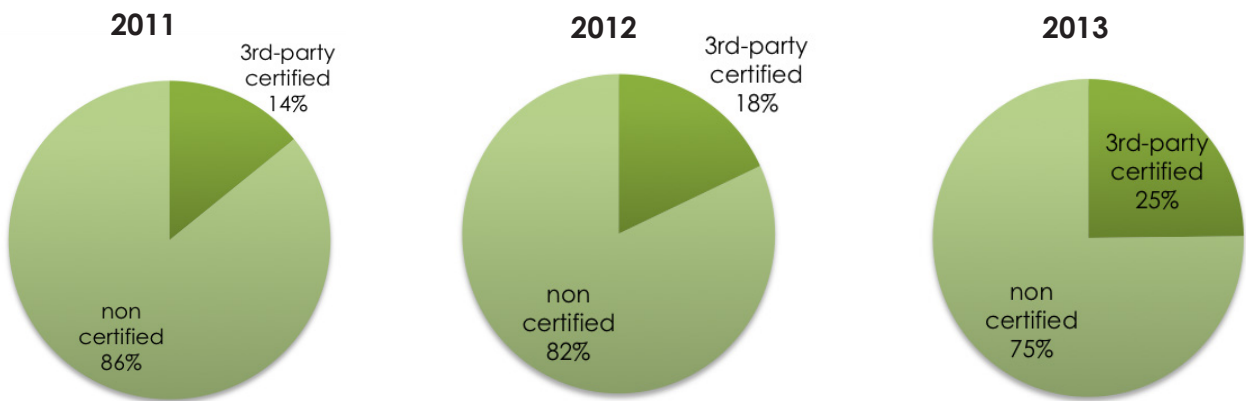
Spending on Cleaning Products, FY2011-2013



Dollars spent on cleaning products **increased 24%** from 2011-2013.

From 2011 to 2013 the percentage of total spending on green cleaning products **increased from 30% to 43%**.

Green Cleaning Products Purchased by volume (oz.)



CONTEXT

Custodial Services uses green products in general cleaning, carpet cleaning, disinfecting and cleaning restrooms throughout campus. Total percentage by volume of green cleaning products is 99%.

FERTILIZER USE

Location

Riverfront fields

Source

Phil Carroll, Campus Operations,
Landscape Maintenance Supervisor

RESULTS

Only one fertilizer is used at PE & Rec outdoor fields: Pro Gold Turf Synthetic Fertilizer—22% nitrogen.

Riverfront Fields Fertilizer Use 2010-2013	
2010	1000 lbs
2011	1000 lbs
2012	900 lbs
2013	900 lbs

CONTEXT

A total of 18,734 pounds were used across campus in FY10. In 2010, PE & Rec constituted 6% of total fertilizer use on campus.

USE OF PESTICIDES, HERBICIDES & FUNGICIDES

Location

All facilities

Source

Phil Carroll, Campus Operations,
Landscape Maintenance Supervisor

RESULTS

No pesticides, herbicides or fungicides have been used on the Riverfront fields between 2010-2013.

Location

All facilities

Source

Deanna Bowden, PE & Rec

RECYCLED CONTENT OF PAPER PURCHASES

RESULTS

8 out of 13 paper products regularly purchased are Green Seal, EcoLogo or Green-Material certified or are made with post-consumer recycled content.

Dollars Spent on Recycled Paper Products as Percent of Total Paper Purchased			
Year	Spent on recycled paper	Total spent on paper	% of total on recycled paper
2011	\$12,129	\$13,424	90%
2012	\$8,556	\$9,343	92%
2013	\$9,356	\$10,311	91%

CONTEXT

The campus recycled paper policy (01.00.14) requires the purchase and use of paper made from a minimum of 30% post-consumer waste recycled content.

So

SOCIAL SUSTAINABILITY INDICATORS

Social sustainability relates to the effects of decisions and actions on people and their communities. The following set of social sustainability indicators were selected by the department in order to capture a sense of the staff culture as well as the wide-ranging services offered to the UO campus community and the broader Eugene/Springfield region.

STUDENT RECREATION CENTER USAGE

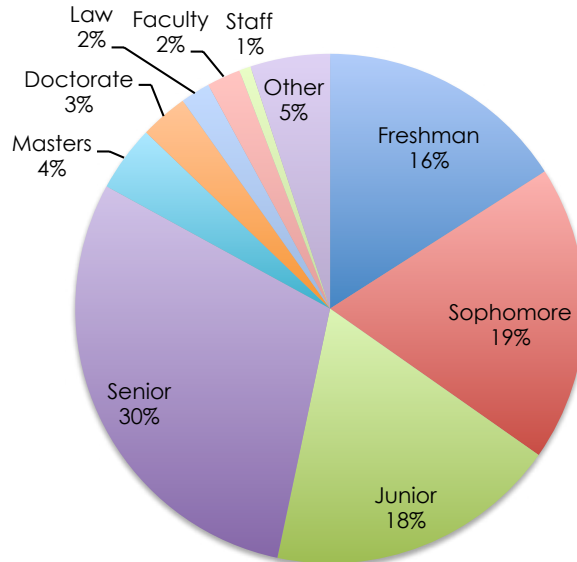
Location
Student Recreation Center (SRC)
Fall 2012
Source
Glenn Cashel, PE & Rec

RESULTS

Fall 2012

Total unique users: 15,327
Total Cumulative Entries: 216,724

User Breakdown by Class/Type



PERCENT TOTAL STUDENT BODY VISITING SRC

Location
Student Recreation Center (SRC)
Fall 2008-2012
Source
Glenn Cashel, PE & Rec

RESULTS

% Students by Year in School who visited SRC during Fall Term 2008-2012				
Class	2008	2009	2010	2012
Freshman	78%	78%	78%	77%
Sophomores	67%	66%	67%	65%
Juniors	57%	60%	57%	57%
Seniors	53%	54%	53%	55%
Undergrads	64%	65%	63%	63%
Law	57%	54%	57%	58%
Masters	38%	39%	37%	38%
Doctorate	42%	41%	37%	37%
Graduates	45%	42%	40%	41%
Total Entrants	13,876	14,748	14,855	15,327

So

FACULTY & STAFF
PARTICIPATION

Location

All facilities, Academic Year 2012-2013

Source

Glenn Cashel, PE & Rec
Peg Rees, PE & Rec

RESULTS

% Faculty/Staff taking PE classes: ~1 % (56 out of 4,986 total)**% Faculty/Staff visiting SRC:** 441 'Staff & Faculty' visited in Fall 2012 or ~9% of the total 4,986PE CLASS OFFERINGS
AND PARTICIPATION

Location

All facilities, Academic Year 2012-2013

Source

Peg Rees, PE & Rec

RESULTS

Classes Offered & % Undergrads Participating, AY12-13		
Term	Classes	% undergrads taking classes
Summer	26	no data
Fall	153	20%
Winter	157	20%
Spring	178	24%
Total	514	21%



PERCENT SRC VISITORS COMING FOR INTRAMURALS

Location

Student Recreation Center

Source

TBD

RESULTS

No data tracking method exists.

PERCENT SRC USERS OF DIVERSE ETHNICITY

Location

Student Recreation Center, Fall 2012

Source

Glenn Cashel via Student Affairs

RESULTS

% SRC Users of Diverse Ethnicity as Compared to Campus, Fall 2012			
Nationality	Total Enrolled	# at SRC	% @ SRC
China	1,491	885	59%
Rep. of Korea	190	109	57%
Japan	121	86	71%
Taiwan	90	69	77%
Saudi Arabia	103	44	43%
Germany	35	30	86%
Canada	63	27	43%
Vietnam	23	17	74%
Thailand	17	15	88%
Iran	20	15	75%
Hong Kong	20	14	70%
France	18	13	72%
Australia	12	11	92%
India	35	11	31%
Singapore	16	11	69%
Brazil	13	10	77%

In Fall 2012, **65% of International Students visited the SRC**, as compared with 63% of all undergraduates and 41% of post-graduates.

Note: The American English Institute, a program for non-native English speakers, uses a classroom in the SRC and are thus included in these counts potentially skewing results upwards. However, Glenn Cashel notes that many of the AEI students also come into the Rec Center to recreate or might recreate before or after class. Also, there is no method to track the international students who play badminton in Gerlinger Annex, volleyball at Mac Court, nor those taking PE classes in Gerlinger.

So

EFFORTS TO INCREASE ACCESS, EQUITY & INCLUSION

Location

All programs and facilities

Source

MCOD Phase II & III
Peg Rees, PE & Rec

RESULTS

All related data and progress on the categories and indicators below for multicultural organizational development (MCOD) is held in the MCOB Phase II & III reports. The initiative has been facilitated by a working group of leaders within Student Affairs.

Category	Indicator
Mission & Values	Applicability of mission and goals to today's student needs
Leadership	Creation of multicultural goals for employees
Supervision	Regular connections with supervised employees
Planning & Decision Making	Involvement of all impacted parties
Recruitment & Hiring	Implementation of improved processes in searches
Professional Development & Retention	Leveled field for opportunities for Officers of Administration and classified staff
Marketing & Communications	Production of materials welcoming and available to all
Research & Assessment	Completion of an assessment addressing the quality of workplace
Physical Environment	Completion of 21 items slated for improvements
Outreach to Under-Represented Groups	Initiatives that make under-represented groups feel welcome
Educational Support	Initiatives that make under-represented groups feel welcome

CONTEXT

The UO Student Affairs Multicultural Organization has stated an ongoing commitment to creating "a safe, welcoming, accessible and fair environment that advocates for social justice and eliminates all forms of oppression."
(<https://sait.uoregon.edu/Portals/0/MCOB/Current%20MCOB%20Report.docx>)

Location

Student Recreation Center (SRC)

Source

Amanda Ferguson, PE & Rec

PROGRAMS OFFERED TO UNDERREPRESENTED GROUPS

RESULTS

1. Tours for International Students during International Student Orientation

Goal: To help break the language barrier, talk about programs we offer, and welcome the students to our facilities. Created in response to increasing number of international students using the SRC.

- Tours started by giving students packets of information (hours card, intramural information, Group X class information, PE class information, pens and notepads with our phone number). The tours consisted of teaching students how to access the facility, check out and use certain equipment, work a combination lock, and find locations of specific activities.
- These tours now take place each term during the International Student Orientation and are marketed in their orientation guide.

2. Women on Weights

Goal: To teach women the benefits of strength training, teach proper technique and terminology, give orientation to specific equipment, and provide them with a personal lifting program.

- Self-identified women trainers worked with participants to create training programs.
- This program was offered once a year for 2.5 hours.

3. Women's Only Weight Room Hour

Goal: To give self-identified women a welcoming, safe, and quiet space to work on strength training. Created in response the low numbers of women in the main weight room.

- This hour has also been popular with women of certain religious groups who wear veils, burqas, hijabs, or chadris.
- The staff working in the weight room during this time are also self-identified women.

4. Faculty/staff only Group X Classes

Goal: To enhance the individual health, fitness, and well-being of University personnel.

- These classes are offered at noon (during a typical lunch break) and at 5:10pm (directly after work) to allow faculty/staff to attend without interfering with work.

5. Strength and Conditioning for Weight Loss Small Group Training

Goal: To help individuals working towards incorporating activity into their lifestyles learn fundamentals of exercise and be introduced to fitness equipment and principles.

- Small group training was scheduled in four week sequences, meeting twice a week for 45 minutes with a minimum of 4 participants and a maximum of 8 participants.

6. Strength Training for Women Small Group Training

Goal: To break down the stereotypes that only men lift weights and help women understand the benefits and learn the principles of strength training.

- Small group training was scheduled in four week sequences, meeting twice a week for 45 minutes with a minimum of 4 participants and a maximum of 8 participants.
- The trainer for this group training was a self-identified woman who incorporates weight training into her workout routine.

7. Family Recreation

Goal: To give students, faculty, or staff who have families the chance to set a healthy example for their children and enjoy physical activities together.

- Family recreation is offered Saturdays and Sundays from 10-5pm.

Location

All facilities, 2009-2013

SourceCody Weaver, PE & Rec
Shelley Villalobos, Office of Sustainability**RESULTS****'ReRev' Program**

In 2009 PE & Rec partnered with the Office of Sustainability to secure a \$7,000 grant from the local utility, EWEB, to purchase and integrate equipment from a company called ReRev that harnesses the kinetic energy of people exercising on elliptical machines. 16 machines were retrofitted at the SRC for a total project cost of \$14,000. A modest amount of renewable power is generated on-site, but more importantly, the machines provide a hands-on educational opportunity for the UO community to engage with the commonly misunderstood units of electricity measurement.



Educational placards displayed on ReRev machines in the SRC

Civil War Energy Competition

The 'Civil War Energy Bowl' is a competition that happens the week before the two schools' football teams compete in the 'Civil War,' and involves students and staff generating electricity at both schools' recreation centers on elliptical machines equipped to harness and track the user's energy output. (see ReRev, above) The data is tracked, and the competition is fierce! Over the five days of the competition in 2012, UO students and staff generated 21,600 watt hours of energy, compared to OSU's 20,000 watt hours—and 35,900 watt-hours in the 2013 competition—a 66% increase over the previous year's total electricity generation.

STAFF VOLUNTEERISM

Location

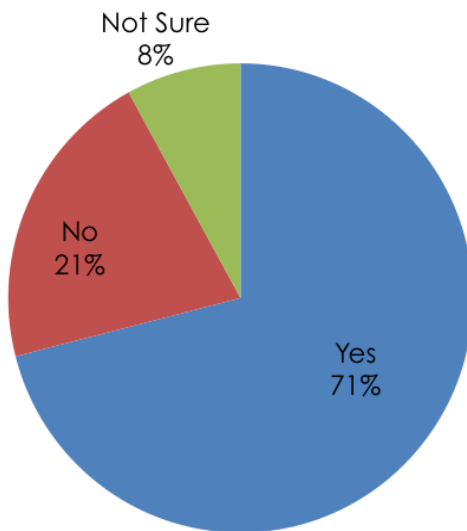
N/A

Source

PE & Rec Staff Survey, May 2013

RESULTS

Question: Did you volunteer your time to a community service project in 2013?



Sample of projects staff volunteered for in 2013:

- University Day
- Unpack the Quack
- Duck Corps Clean-Up
- Food for Lane County

So

NON-DEPARTMENTAL FUNCTIONS HOSTED AT FACILITIES

Location
All facilities, 2012

Source
Glenn Cashel, PE & Rec

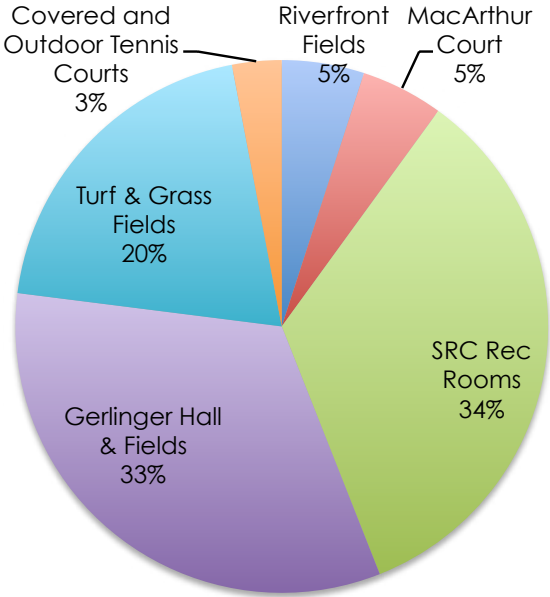
RESULTS

There were approximately **300 unique event** rentals to **114 unique groups** that took place at PE & Rec operated facilities in 2012.

75% of facilities rentals were to UO-affiliated groups or entities
25% were rentals to the larger community

The figure shows the breakdown of facilities rentals.

Rentals Breakdown by Facility, 2012



CONTEXT

See Appendix B: 'Campus & Community Groups that Rented Facilities in 2012' for a complete list of the public and campus groups that rented facilities in 2012.



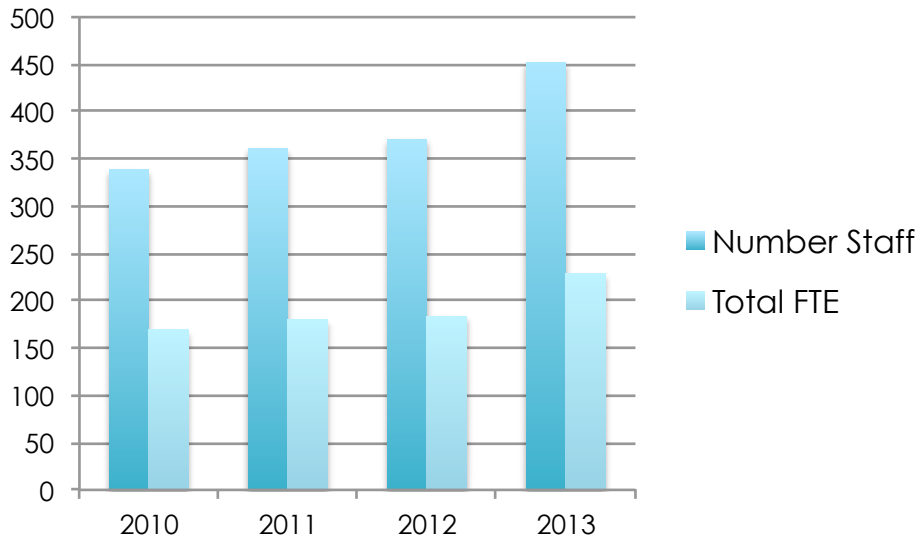
DEPARTMENT STAFFING

Location
All Facilities, 2010-2013

Source
Cindy Fitzgerald, PE & Rec

RESULTS

Total PE & Rec Employees/Staff/Faculty and Cumulative FTE, 2010-2013



Year	Total Staff	Total FTE
2010	339	169.21
2011	361	179.95
2012	371	183.44
2013	452	229.06

CONTEXT

In Fall 2012, the total UO employee headcount including all faculty, officers of administration and classified employees was 4,986. (Office of Institutional Research)



INVESTMENT IN PROFESSIONAL DEVELOPMENT FOR STAFF

Location

N/A

Source

Cindy Fitzgerald, PE & Rec

RESULTS

Professional Development Expenses Breakdown in Dollars, 2008-2013



Professional Development Expenses	2008	2009	2010	2011	2012	2013	Avg
Conference Registration Fees	\$9,853	\$5,559	\$5,059	\$7,359	\$5,349	\$7,499	\$6,780
Training-Tuition/Registration	\$824	\$1,302	\$1,680	\$4,634	\$2,445	\$2,544	\$2,238
In-State Employee Travel	\$13,720	\$10,538	\$8,256	\$8,435	\$8,671	\$2,934	\$8,759
Out of State Employee Travel	\$8,546	\$10,501	\$12,875	\$18,423	\$23,705	\$17,987	\$15,339
Totals	\$32,943	\$27,901	\$27,869	\$38,851	\$40,170	\$30,964	\$33,547

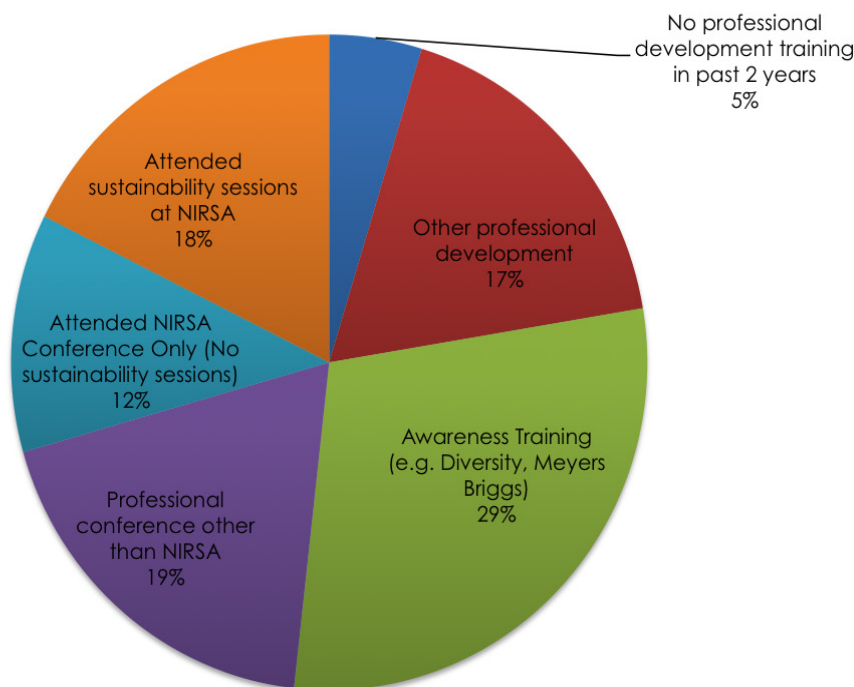
PROFESSIONAL DEVELOPMENT ACTIVITIES

Location
N/A

Source
PE & Rec Staff Survey, May 2013

RESULTS

Self-Reported Professional Development Activities by Staff, 2011-2013



Sample of Professional Development Activities Reported by Staff

- Ally Training
- Diversity Training
- Emotional Intelligence Training
- Special Needs Training
- Leadershape
- Strengths Quest
- Supervisor Training
- Medic First Aid Instructor Training
- Oregon Women in Higher Education Conference

ECONOMIC SUSTAINABILITY INDICATORS

Economic sustainability relates to the financial operations of the department. The following set of economic indicators were selected by the department in order to capture a snapshot in time of current budgetary and economic realities.

OPERATING BUDGET AND SOURCES

Location

All facilities and operations

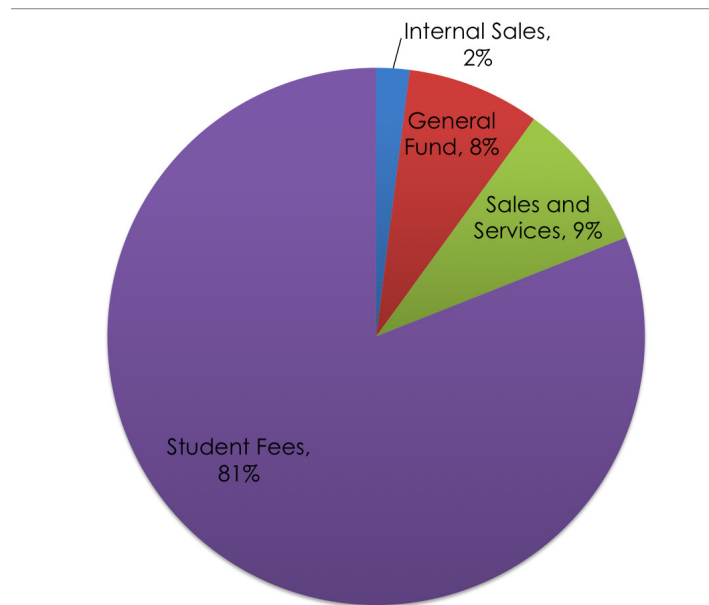
Source

Sue Wieseke, PE & Rec
 UO Budget and Resource Planning,
 Expenditure Budget Report-FY2013

RESULTS

Total Dept. Budget, FY10-13	
Year	Budget
FY10	\$4,054,670
FY11	\$4,608,851
FY12	\$5,133,353
FY13	\$5,401,416

Percentages and Sources of Operating Budget 2013



CONTEXT

Student Affairs Units Budgets, FY2013			
Unit	Total Permanent Budget	Total Temporary Budget	Total Expenditure Budget
PE & Recreation	\$5,823,728	\$1,552,907	\$7,376,635
Career Center	\$1,370,452	\$156,484	\$1,526,936
Health Center	\$12,191,783	\$5,528,150	\$17,719,933
Erb Memorial Union	\$11,106,548	\$2,003,061	\$13,109,609
Office of the Dean of Students & VP Student Affairs	\$6,932,314	\$1,492,457	\$8,424,771
University Housing	\$52,560,007	\$14,852,682	\$67,412,689
Counseling & Testing Center	\$2,758,204	\$1,140,538	\$3,898,742

From: UO Budget and Resource Planning, Expenditure Budget Report-FY13



BUDGET RESERVES AND GOALS

Location

All facilities and operations

Source

Sue Wieseke, PE & Rec

RESULTS

As an auxiliary unit, the department keeps **reserve funds** available for various cost areas including the following:

- 1) Building maintenance
- 2) Capital costs >\$5,000
- 3) Improvements Other Than Buildings (IOTB) - (Turf) Fields replacement

The department has undertaken a process to identify and put in place **measurable goals** for 5 and 20-year timelines. Two strategies that have been identified are:

- 1) Manage costs more aggressively
- 2) Diversify revenue streams

AMOUNT SPENT PER SRC USER

Location

Student Recreation Center (SRC)

Source

Sue Wieseke, PE & Rec

Glenn Cashel, PE & Rec

RESULTS

Department Spending per SRC Visitor- Fall '12			
Term/Year	SRC Cumulative Entries	Term Expenditures Budget	\$ Spent/Entry
Fall 2012	216,724	\$1,683,453	\$7.77

AMOUNT SPENT PER UO STUDENT

Location

All facilities and operations

Source

Sue Wieseke, PE & Rec

RESULTS

Department Spending per Enrolled UO Student, FY10-13			
Year	Total Expenditures/ Budget*	Total UO Enrollment	\$/Student
FY10	\$3,515,709	22,386	\$157
FY11	\$4,175,904	23,389	\$179
FY12	\$4,832,500	24,447	\$198
FY13	\$4,433,124	24,591	\$180
Average			\$178

*excludes dollars dedicated to expansion project to reflect actual annual spending

MAINTENANCE SPENDING PER SQUARE FOOT OF FACILITY SPACE

Location

Student Recreation Center (SRC)

Source

Sue Wieseke, PE & Rec

RESULTS

Dollars Spent on Maintenance as Percent of Total Budget			
Fiscal Year	Maintenance Expenditures	Maintenance Expenses/Sq ft	% Total Budget on Maintenance
2010	\$601,845	\$1.44	15%
2011	\$651,419	\$1.55	14%
2012	\$748,178	\$1.78	15%
2013	\$678,118	\$1.62	13%

Note: total square footage of all indoor facilities: 419,155



STAFF PER STUDENT RECREATION CENTER USER

Location

All facilities and operations

Source

Glenn Cashel, PE & Rec
Cindy Fitzgerald, PE & Rec

RESULTS

Fall 2012: approximately 1 staff member per 41 users (1:41)
14,111 unique student users/371 total staff members = 41

TOTAL VALUE OF DEFERRED MAINTENANCE

Location

Student Recreation Center (SRC)

Source

Sue Wieseke, PE & Rec

RESULTS

No items of deferred maintenance currently exist at facilities operated by PE & Rec.



OVERSIGHT AND PARTICIPATORY GOVERNANCE

Location

Student Recreation Center (SRC)

Source

Sue Wieseke, PE & Rec

RESULTS

About the Student Recreation Center Advisory Board

ROLE

The Student Recreation Center Advisory Board, as established in cooperation with Department of Physical Education and Recreation (PE & Rec) Administration, advises on the Student Recreation Center (SRC) operations, as a portion of the overall responsibilities assigned to PE & Rec by the University. The Board is responsible for representing SRC facilities, classes, programs and services to the University community, and for promoting the fitness and recreation needs of students.

The Board is charged with advising PE & Rec administration on long-range planning, facility use, user fees and budget operations, except those that affect the physical education program, personnel, training, performance, evaluation, or safety issues.

STRUCTURE

There are 15 board members—4 student members and 1 faculty or staff member serve one year rotating terms, 6 student representatives are appointed via ASUO student elections and the 4 standing ex-officio members are: the Director of PE & Rec, the Associate Director for Facilities and Operations, Associate Director for Programs and the PE & Rec Accountant.

EC

EXERCISE REWARDS

Location

Student Recreation Center (SRC)

Source

Tiffany Lundy, PE & Rec

RESULTS

The 'Exercise Rewards' program offers a \$15/month incentive through the Oregon Public Employee Benefits Board (PEBB). To be eligible, staff, faculty and their partners commit to exercising at least three times per week or twelve times per month at a participating fitness organization. The Student Recreation Center (SRC) is one of many participating local fitness organizations in the area. UO Exercise Rewards Program Participants include Staff, Faculty and Partners, who have signed up for the Exercise Rewards Program through PEBB.

Exercise Rewards Participation in 2013 (First Year)			
Staff Type	UO Exercise Reward Program Participants, who use the SRC	All UO Faculty, Staff and Partners who use the SRC	% of UO Faculty, Staff and Partners who use the SRC and get the \$15/month Incentive
Faculty/Staff & Partners	160	523	31%
Faculty/Staff Non-Member Group X	10	94	11%

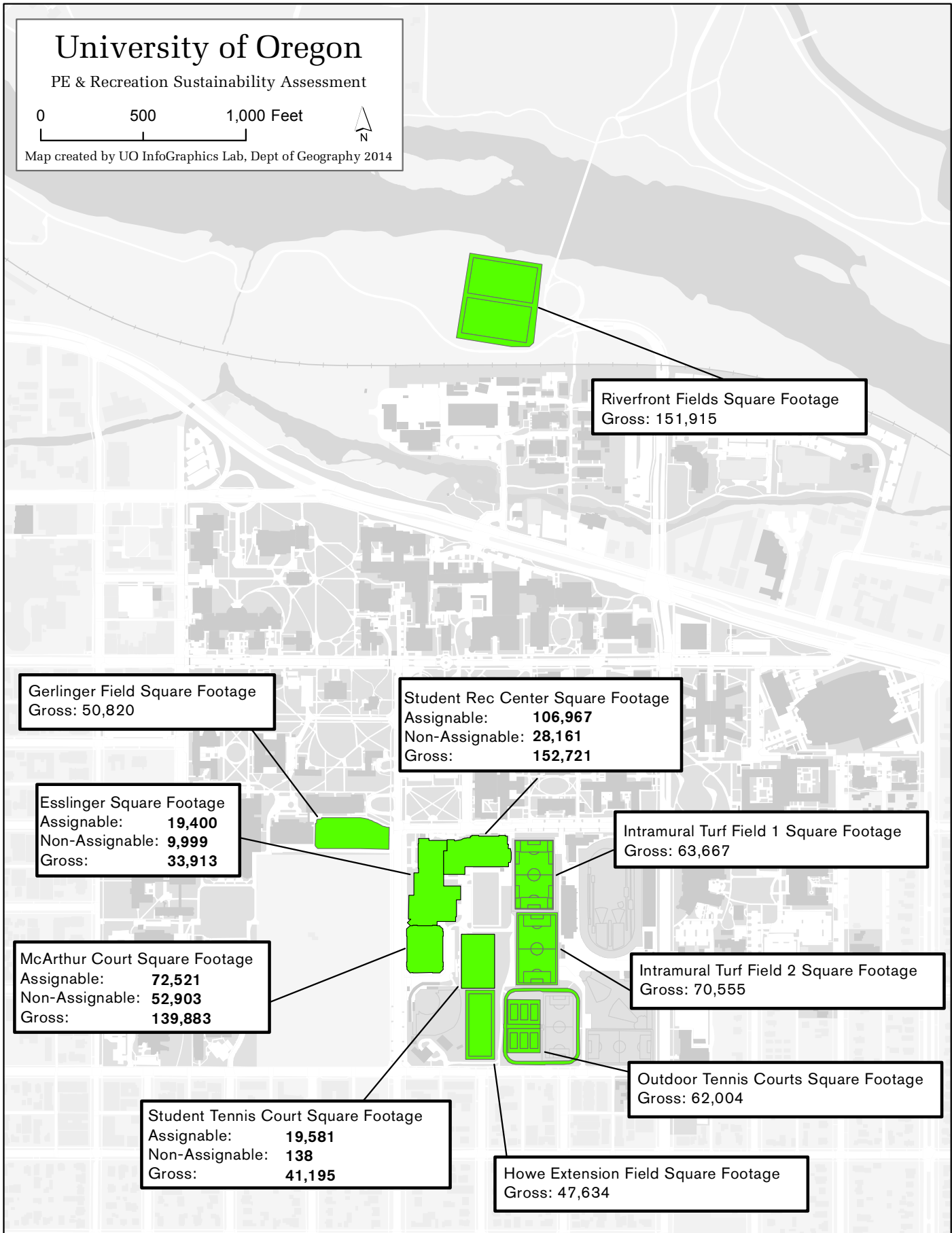
CONTEXT

P.42

There are approximately 11,000 facilities nationwide that participate in the PEBB Exercise Rewards program. (oregon.gov/DAS/PEBB in 2013)

APPENDICES

APPENDIX A: PE & REC SPACE INVENTORY MAP, UO GIS/INFOGRAPHICS LAB



APPENDIX B: LIST OF CAMPUS & COMMUNITY GROUPS THAT RENTED FACILITIES IN AY2012-13

Month Group/Event

Jun-12 Prefontaine Classic T&F meet
 U.S. Olympic Trials T&F
 Muslim Student Assoc.
 Hawaii Club
 Ballroom Dance Club
 SPUR Program
 Rights of Passage
 LBGTQA
 Chi Omega
 DPS (self defense)
 Duck Street Dance Club
 Willamette HS
 South Eugene HS
 Graduation Ceremonies
 UO Soccer Camp
 Athletic Dept.
 Alumni Relations
 Oregon Center for Optics
 Athletic Dept.
 Graduate Internship Program
 MBBall Youth Camp
 AEI

July

IntroDUCKtion
 Lorne Smith Lacrosse Youth Camp
 Music Camp
 SEP program
 CSA
 NCA Cheerleading youth camp
 Next Level Ultimate Youth camp
 JKA Northwest
 Upward Bound
 Ekklesia
 Spirit Brand Cheerleading Youth Camp

August

SAIL Program
 Imperial Lacrosse Youth Camp
 Power of 3 Cheer & Dance Camp
 Women's Ultimate Frisbee Club

Sept

UO Marching Band
 Material Sciences Institute
 International Affairs
 Week of Welcome
 Health Center
 Sigma Nu
 Phi Delta Theta

Oct

Panhellenic Council
 Kappa Alpha Theta
 Alpha Epsilon Pi
 Sigma Chi
 Beta Theta Pi
 The Navigators
 Sigma Alpha Epsilon
 Outdoor Program
 IMPACT
 Ambassador Program
 Taiwanese Student Association
 Saudi Student Association

Nov International Student Association
 Comparative Literature
 UO Athletics
 Kappa Alpha Theta
 Table Tennis Tournament
 Cytosport, Inc.
 UO Housing
 NW Christian Ministries

Dec

Jan Zinga-Eugene
 Human Phys Dept.
 Jam Squad
 UO Swim team
 Mind the Gap
 Divisi
 Teaching & Learning Center
 cultural forum
 Dance Marathon
 Phi Gamma Delta
 Many Nations Longhouse

Feb

Kappa Kappa Gamma
 Admissions
 Men's Lacrosse club
 MultiCultural Center
 Alpha Kappa Psi
 Family Programs
 Kappa Delta

March

Appropriate Dispute Resolution
 Office of the Dean of Students
 KSA
 CSSA
 Financial Aid
 NASU
 Music Dept.
 Cathedral City HS

April

Ducks for a Difference
 Lambda Chi Alpha
 Model UN
 Raza Unida Youth Conference
 Landscape Architecture
 Military Sciences
 Law School
 CPC
 Eugene Marathon
 Delta Delta Delta
 Badminton Tournament
 Delta Gamma

May

Family & Human Services
 Conference Services
 Delta Tau Delta
 Black Student Union
 Delta Sigma Phi
 UOSAMS
 Relay for Life
 OSAA Tennis Championships
 PRSSA
 OSAA T&F Championships
 Michael Strong

UO Department of
P.E. & Recreation

Waste Audit Results

Fall 2013

Project Goals

A waste audit of the Department of PE & Recreation was undertaken with the following three primary goals:

- 1) *Identify what types of materials comprise the waste stream at facilities operated by P.E. and Recreation*
- 2) *Identify what materials are currently being diverted from the waste stream via recycling and composting and in what quantities*
- 3) *Identify what materials are currently NOT being diverted from the waste stream and in what quantities*



Student volunteers pause from sorting waste during the PE & REC Waste Audit in November '13.

Methods

Landfill Waste

- 1) The planning team first identified eight facility areas where waste is collected, and then arranged with Campus Operations (which picks up the trash) to delay service in order to first sort through a sampling from each area. Campus Zero Waste is a separate unit that collects the recyclable and compostable waste streams.
- 2) Volunteer staff members from the department and the planning team emptied and sorted half of the total bags collected from each area, therefore sampling 50 percent of the total materials collected from Mon 11/4 and Tues 11/5 for audit #1, and used the same methodology to sample 50 percent of materials collected from Fri 11/8-Sun 11/10 for audit #2. Every other bag from each area was chosen for sorting to ensure that the samples were random.
- 3) Individual bags were sorted on tarps by 'area,' then into six categories based on the landfill diversion capabilities of Campus Zero Waste. Weights were recorded in pounds, and auditors estimated volume in gallons using five gallon buckets as a visual guide, before recording this data by category and area.
- 4) To get an estimate of the total amount of waste for a given week, the numbers from M/T were doubled to account for W/R, and then all numbers were doubled again to account for the fact that only 50 percent of bags were sorted through.
- 5) The week audited was week five of the term, an average week for user traffic at the Student Recreation Center within .01%. Week 5 saw 20,441 users pass through the doors, while the average of all the weeks of fall term in 2013 was 20,491 users per week.
- 6) Areas Sampled & Sorted;

- | | |
|--|--------------------------------|
| 1. Student Rec Center (SRC) Locker Rooms | 5. Student Tennis Center (STC) |
| 2. Admin/Office Areas | 6. Gerlinger Hall |
| 3. SRC Kitchen | 7. Turf Fields |
| 4. SRC Halls & Workout Areas | 8. MacArthur Court |

Campus Zero Waste

Campus Zero Waste (CZW) gathered, weighed, and reported the weights of two week's worth of materials collected from its normal hauling routine at PE & Rec facilities between Monday October 28 and Friday November 8, 2013. CZW picks up from a recycling dumpster located behind MacArthur Court, and a compost bin outside the southwest entrance of Esslinger Hall.

Results

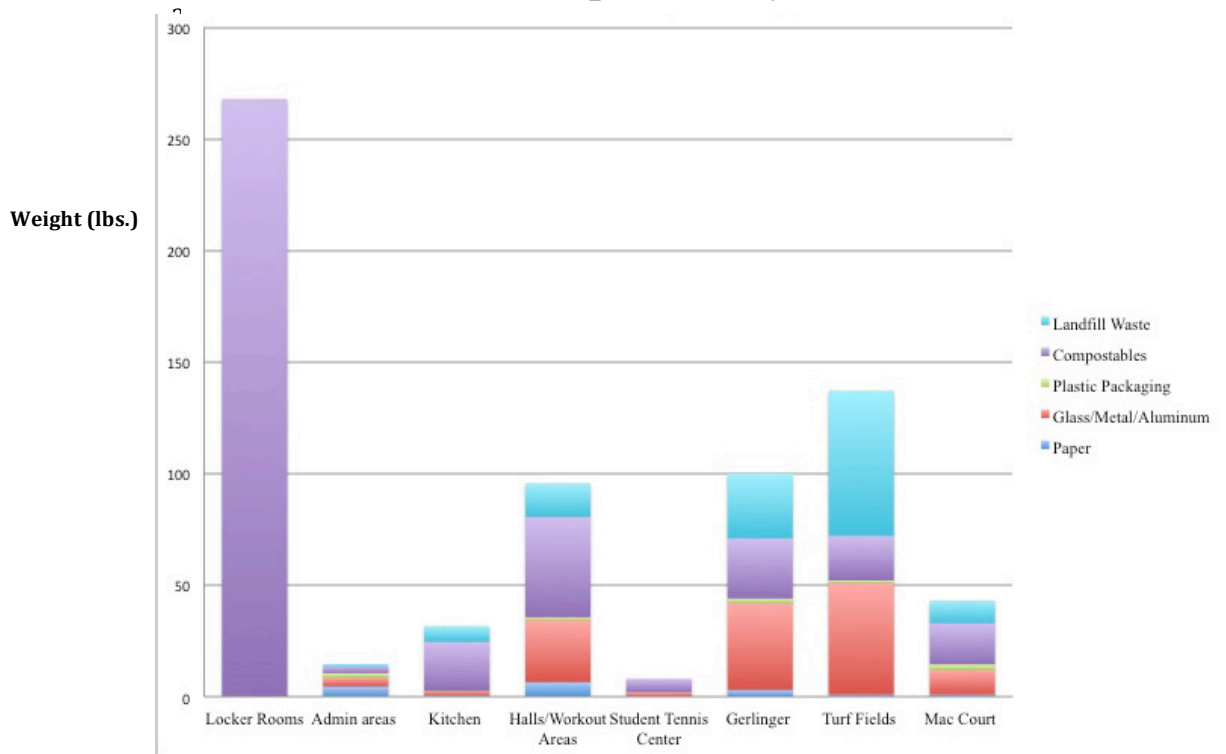
Question 1: What materials comprise the waste stream at the facilities operated by the Department of P.E. and Recreation?

During an average week of fall term, the department disposes of a total estimated 915 pounds of waste. About 700 pounds goes to the landfill (76 percent), while the other 215 pounds (24 percent) is recycled (see Figure 1). It was found that an estimated 500-600 pounds more of all waste each week *could be* recycled or composted, for a possible total of 80-90 percent diversion. To see which facilities produce the most waste and which facilities produce the least waste, see Figure 1 below.

Coffee cups, food wrappers, hard plastics and various other packaging items make up a large portion of non-divertible materials, while plastic packaging, food and beverage containers (aluminum, glass, plastic) and paper towels make up a large portion of divertible materials that end up in trash cans.

Figure 1

Waste Composition by Area



Question 2: What materials are currently being diverted from the waste stream and in what quantities?

The 433.5 pounds of combined recyclable and compostable materials collected by Campus Zero Waste amounts to an average weekly total of 217 pounds, or 24 percent, of the total refuse (Figure 2). To see a breakdown of the types of recyclables hauled by Campus Zero Waste see Figure 3 below.

Figure 2 Current Disposal of All Waste by weight

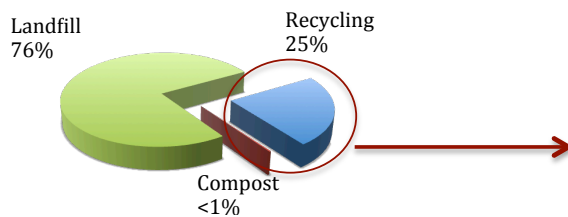
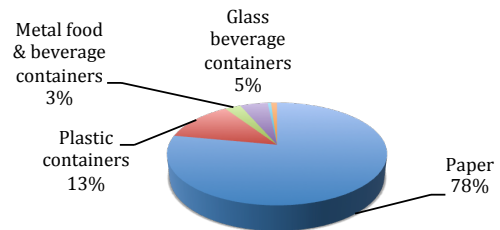


Figure 3 Breakdown of Recycling by % total weight



Question 3: What materials are currently NOT being diverted from the waste stream and in what quantities?

Results show that 18 percent of the department’s total waste cannot be recycled or composted. By weight, approximately 82 percent of materials that are currently thrown away *could be* recycled or composted. The total weight that could be otherwise diverted across all eight facilities is 571 pounds out of the total landfilled weight of 698 pounds per week on average. Refer again to figure 1 on page 2 to see the categories of materials currently being trashed in each area.



Rodney Bloom (P.E. & Rec) sorts waste during the audit

Sample of waste from the audit that cannot be recycled or composted

Conclusions

The waste audit increased clarity about the department’s waste stream. Neither custodial services (landfill waste collection) nor Campus Zero Waste (recycling and compost collection) currently measure waste weights or volumes by department or facility. For the first time, the department can make data-based statements about its waste stream and diversion efforts.

Campus Zero Waste reported an overall campus diversion rate of 48.7 percent (1489.42/3059.19 tons collected) in February 2011¹. Therefore, the Department of PE & Rec is currently underperforming by a margin of about 25 percentage points in terms of the University-wide effort. While numbers are not available for comparison with most other departments in terms of *how much* waste is produced and diverted, Campus Zero Waste staff performed a similar audit in April 2013 at the Knight Law Center (KLC) providing one opportunity for comparison (see Figure 4 below). This data shows that while the diversion rate may seem low in comparison to KLCs and the University as a whole, the diversion rate doesn’t tell the whole story. In fact, the Department of PE & Rec is quite lean in its overall production of waste compared to the Knight Law Center, both per person, and in terms of square footage of facility space on average.

Figure 4

Facility	Total square feet	Waste per day	Diversion Rate	Usage	Waste/person/day	Waste/sq. ft./day
Knight Law Center	~138,000	~240 pounds	38%	~400 people/day	.6 lbs.	.0017 lbs.
P.E. & Recreation	~419,000	~130 pounds	24%	~3,000 people/day	.04 lbs. (15x less)	.0003 lbs. (~5x less)

In addition to its low rate of waste production in the first place, especially in the administration and kitchen areas (see Figure 5), PE & Rec Department staff do a great job of getting paper into the recycle bins (see Figure 6).

Figure 5

Total Waste Production by Area

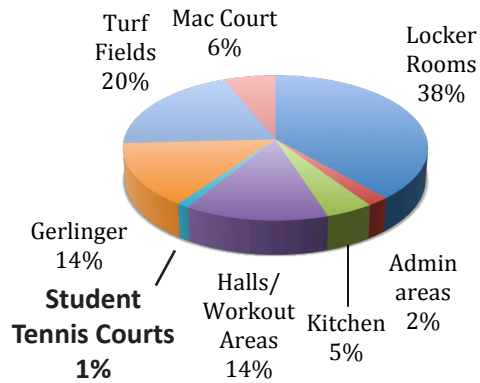
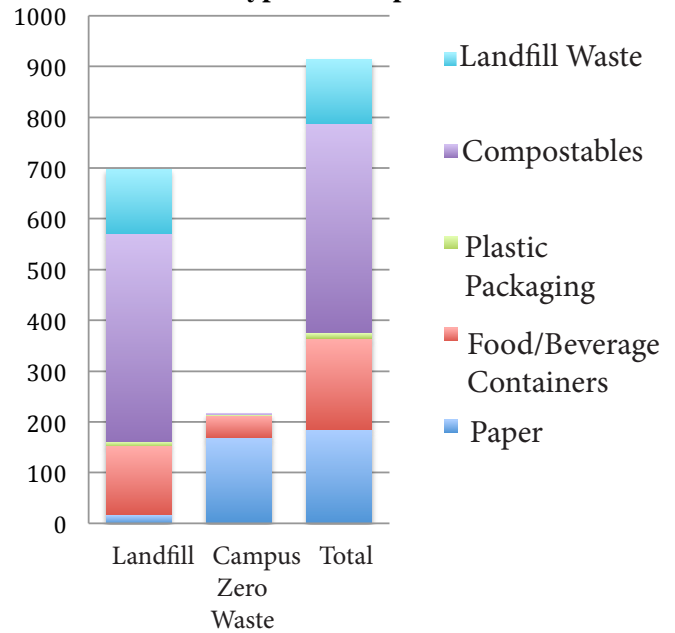


Figure 6

Total Breakdown of Waste by Type and Disposal



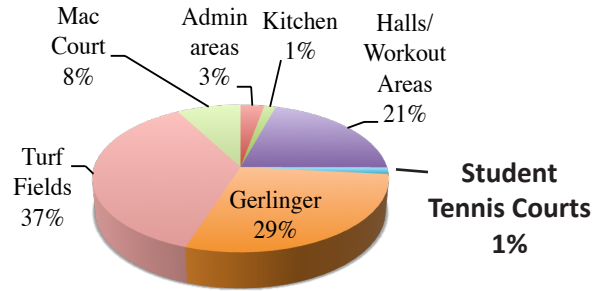
Recommendations

Based on these findings, there is significant opportunity for the department to improve upon waste diversion at its facilities. Our recommendations for doing so are as follows;

- 1) Four of the audited areas are responsible for 86% of the total refuse (Figure 5); Locker Rooms (38%), Turf Fields (20%), Gerlinger (14%) and Halls and Workout Areas (14%). These areas offer the most opportunity for significant improvements in the waste diversion rate. Plastic/Metal/Aluminum Recycling — About 100 pounds of plastic, metal and aluminum beverage and food containers are currently being misplaced into trash bins, rather than being recycled. The majority of this improper disposal of waste occurs at Gerlinger, the Turf Fields, and the halls and workout areas of the SRC (Figure 7).
- 2) See recommendations (below, points b,c,d) on how to increase the recycling rate at those locations.
 - a. Locker Rooms (38%)— For hygienic and safety reasons, this waste was not sorted and was rather weighed in bags. Visually and by weight, it was clear that the vast majority (95+%) all of the locker-room waste was made up of paper towels. This waste can be eliminated entirely by implementing touchless air hand dryers. Modern models cost between \$1000-\$1500 each. The dept. spent \$5,033.20 on paper towels in 2013, and thus, could purchase the necessary dryers while displacing the need for buying paper towels. After the initial investment has been recouped, the department would save money previously spent on paper towels, and simultaneously eliminate the largest portion of its waste stream.
 - b. Turf Fields (14%)— Many recyclable food and beverage containers are currently being discarded into trash bins at the turf fields (see Figure 7). By installing recycling bins with clear signage directly next to each trash can (in pairs), this stream can be diverted with ease. Currently, the waste bins at the turf fields stand-alone.
 - c. Gerlinger (14%)— The same approach (paired trash cans and recycle bins) as described for the Turf Fields is recommended, as well as installing touchless hand air dryers in the bathrooms to eliminate the waste stream of paper towels.
 - d. Halls & Workout Areas (20%)— A large percent of the trash in this area is compostable or recyclable, therefore, we recommend the implementation of a 3 bin side-by-side system. In such a system, there are bins for 1) recyclables, 2) compostables and 3) landfill waste. Each bin is the same size, and is clearly and consistently marked with pictures of what items go into each bin for easy self-sorting by SRC users.

Figure 7

Plastic/Metal/Aluminum Containers Going to Landfill by Area



Additionally, we recommend connecting with Campus Zero Waste about setting and achieving goals around greater waste diversion. They are well equipped to help divert paper and food/beverage containers away from trash bins, and into recycling bins.

This waste audit was led by Rodney Bloom (PE & Rec), Molly Phenix (UO Sustainability Coalition—Buildings & Zero Waste Board Chair) and written by Shelley Villalobos (Office of Sustainability).



Office of Sustainability

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