Facilities Services Sustainability Work Group

University of Oregon
Campus Operations, Growing Sustainability

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Message From F.S. Sustainability Work Group

Feedback, Please
The Sustainability Work Group needs your input. Keep us informed of your thoughts, campus operations sustainable projects, nominations for superstars, ideas, and feedback.

Forward all comments to: knowaste@uoregon.edu

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What Is Sustainability?

According to United States Environmental Protection Agency, “Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations.”

What is Sustainability in Campus Operations?

Improving the efficiency of our campus and protecting ecological systems to enhance the well-being.

UO Campus Operations embrace sustainability through a focus on:

- Greening buildings
- Switching to renewable sources of energy for more efficiency
- Support local economic development
- Conserve water and resources
- Minimize toxic chemicals
- Protecting wildlife habitat
- Purchasing environmentally and socially preferable products
- Reducing dependency on petroleum-based fuels for transportation: buying biodiesel, electric, and hybrid vehicles for campus.
- Zero waste by reducing, reusing, recycling, and composting.
Headed Towards Zero Waste-UO Football Reduces Landfill Waste

As the Ducks continue to gain momentum in the Pac 12, having a winning team goes beyond the field. The Ducks have incorporated waste reduction activities into Autzen Stadium. This year zero waste is an important part of the game day. Here’s what’s going on:

* The student group, the Climate Justice League, is working with Athletics to capture bottles and cans generated in the tailgating areas. As vehicles enter the area, the CJL is handing out bags for recyclables. Fans can fill the bags and the CJL will come and pick them up for recycling!

* The Moshovsky Center has gone Zero Waste. Thanks to the Athletic Department Food Services, all of the food ware is now compostable. Thanks to Sanipac for working to collect these items that head to Rexius for composting. The Mo Center now has three waste sorts: compostables, recyclables and landfill.

* The bowl clean-up also includes separation of the recyclable items.

Thanks to UO Athletics for getting in the zero waste game, it’s a hit with the fans and a great effort to support the UO’s efforts on sustainability.

America Recycles Day

For the past 23 years communities across the nation have come together on November 15th to celebrate America Recycles Day. This year the celebration will continue as a way to promote recycling in the United States. On this day communities and organizations hold events to help educate and motivate people to recycle. Thousands will pledge to learn more about recycling within their communities, and to act on their personal waste by taking efforts to recycle.

Campus Recycling will host a visual demonstration on decomposition of waste, outside the Collier House, to educate students on recycling facts. Also recyclers will be helping students sort food waste in the EMU food services, to aid students with their recycling and compost.

To take the recycling pledge and for more information visit: http://americarecyclesday.org/

Sustainability Facts

- Buildings represent 38.9% of U.S. primary energy use (includes fuel input for production). [UO Sustainability](#)

- The Lillis Business Complex has five solar arrays on it, which generate 44kW of the electricity (enough to power seven average-size homes year round). [UO Lillis Business Complex Facts](#)

- UCLA has installed over 600,000 energy efficient bulbs and 3,600 low energy exit signs. Also new Heating Ventilation and Air Conditioning (HVAC) Modernization will reduce UCLA’s carbon footprint by 17,000 tons/year. UCLA’s energy consumption per sq. ft. has continued to drop over the last 8 years. [UCLA sustainability](#)

- Stanford has allocated $15 million for major capital improvements to the most energy-intensive buildings on campus. The Energy Conservation Incentive Program rewards schools and administrative units for saving energy—rebates totaled $830,000 by the end of the program’s third full year. [Stanford Sustainability](#)

Sustainability Tips

HOW TO: Clean your home and office space chemical free!

**All purpose spray:**
- 2 cups of water
- 2 tablespoons white vinegar
- 1 teaspoon liquid soap
- 1 teaspoon borax

**Pot and surface Scrub:**
- Add some baking soda
- Spray some white vinegar
- Allow it to bubble and sit
- Wipe and rinse well
Sustainability Superstar
Ray Anderson

In loving memory of Ray Anderson, he is awarded the Sustainability Superstar of the month! Ray Anderson, founder and former chairman of the carpet company Interface, recently passed away but his ideas and sustainability initiatives will live on forever. Anderson brought a new concept to the business world by successfully excelling in sustainability. Interface is one of the largest carpet manufacturers, and Anderson proved that sustainable practices could thrive in even the corporate world. Co-author of Natural Capital, Hunter Lovins, describes Ray in the NY Times: “He was the first to prove that corporate-wide, systemic commitment to sustainability could increase profitability. Before him, behaving in ways which are responsible to people and the environment were seen as costs for the business rather than a source of profit.” Ray was deeply inspired after reading The Ecology of Commerce by Paul Hawken. He then decided to reassess Interface and implement new practices, directing the company towards his new goal, “Mission Zero.” Interface describes this mission on their website stating, “Mission Zero® is the company’s promise to eliminate any negative impact it may have on the environment, by the year 2020, through the redesign of processes and products, the pioneering of new technologies, and efforts to reduce or eliminate waste and harmful emissions while increasing the use of renewable materials and sources of energy.” The company follows The Natural Step principles; principles created by a group that helps companies accelerate change towards sustainability. Anderson also assured that the company was an employee-led system, and incorporated team work and suggestion from the employees. Anderson had employees work in cross-functional teams with similar goals, encouraging different perspectives and ideas. The company now uses 30% renewable energy and is 50% away from their Mission Zero goal. Ray Anderson was a true pioneer to the sustainable business world and his efforts will continue to inspire Interface and other business for years to come.

For more information on Ray Anderson and Interface visit: http://www.interfaceglobal.com/

Green Sports Alliance

The Green Sports Alliance is a nonprofit organization that works with sports teams, venues, and leagues to help reduce their waste and increase sustainability. The Portland Trail Blazers are a founding team member of the alliance along with many other teams throughout the U.S. The Alliance launched in March 2011, and since then, more than 50 sports teams and venues have joined. The Alliance has been working hard to reduce the sport industries’ ecological footprint. The members of the alliance attend conferences to exchange ideas and create innovative ways for their teams and venues. Through technological advances and collaborative research the Green Sports Alliance has become a highly developed model for sports facilities all over the country. The Alliance encourages Stadium Managers to enhance the efficiency in operations of stadiums.

The Oregon Trail Blazers have taken the lead in sustainability and President Larry Miller has been a spokesman to the progress. The Blazers have implemented a variety of green initiatives for their stadium, The Rose Garden. Some initiatives have been reducing energy and water, while increasing recycling and carpooling. The Rose Garden was the first sports arena in the world to earn a LEED Gold Certification. The Rose Garden in 2010 had a landfill diversion rate of 80%. The Trail Blazers hope to continue to foster sustainability and eventually achieve a Platinum LEED certification. The Green Sports Alliance will continue to motivate teams and push for the movement of sustainability, in hopes to achieve a new type of competition that is arising in the sports industry.

For more information on Green Sports Alliance visit: http://greensportsalliance.org/

Source: http://www.greendroprecycling.com/pages/diversion
**Switching Light Bulbs on Campus Increases Energy-Efficiency**

A current sustainability project on campus aims to reduce energy use by installing new energy efficient light bulbs on campus. The US national energy policy encourages switching out old light bulbs for newer more efficient bulbs, to help save energy and money. 25% of all energy used in buildings in the United States is from electric lighting. Turning off the lights is one way you can help cut back energy consumption, but also installing fluorescent lights in the place of incandescent or halogen lighting can really reduce energy and save money. Most buildings on campus previously used T12 light bulbs but now campus operations will install T8 light bulbs for ½ of the campus buildings.

T12 and T8 refer to diameters of lamp tubes. Thus a T12 has a diameter of 1-1/2 inches. A narrower lamp like T8 is more energy-efficient since it is 8/8th of an inch in diameter. T8 lamps function with less mercury reducing potential harm that can be caused from the substance used in many lighting fixtures. Retrofitting our bulbs on campus will help the campus save $600,000 and EWEB will give a rebate back for energy reduction. These light bulbs will also last longer than the previous ones, lasting up to 100,000 hours, and it includes a five year warranty. Once all the new light bulbs have been installed campus operations expects to reduce the energy of buildings by 20%.

For more information on T8 Bulbs visit: http://www.globalindustrial.com/g/electrical/bulbs/fluorescent-linear/t8-fluorescent-tubes

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**Don’t Throw it Away!**

* Campus Recycling accepts all food scraps, including meat and dairy, in compost bins!

Campus Recycling recently expanded composting services to allow all food scraps, including meat and dairy. The State of Oregon has been working with large scale composters to expand compostables to include meat and dairy and to update the permitting to do this process. Rexius picks up UO compost weekly and turns it into a variety of soil products. The company recently built a larger composting area, which now allows processing of more food scraps including meat, dairy, bones, eggshells, tofu and oils. Since the expansion, composting is now being offered to local restaurants, grocery stores, and other commercial businesses in Eugene.

Composting usually takes up to 90 days on average before it turns into fresh soil. Compost soil is useful because it brings nutrients back into the soil and aids water drainage which plants require. There is hope that this new expansion will eventually allow Eugene to create its own curbside composting system, resembling those which Portland and Corvallis have implemented. Curbside composting systems allow households to put left over food scraps into curbside yard bins.

Increasing the compostables stream to include all food and meat, will enhance the UO composting effort and further waste reduction efforts. Every year 10,000 tons of food scraps are sent to the local landfill, Short Mountain Landfill. This year Eugene hopes to turn 3,200 tons of food scraps into compost instead of waste!

If you are interested in reducing your waste and creating nutrient-rich soil for your garden, check out how to start your own household composting system!

For more information on Rexius new expansion in Eugene, check out this article from the *The Register-Guard*. 

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Wetland Woes

In the 1600s, there were an estimated 220 million acres of wetlands in the United States. In a mid-1980s estimate, there were only 103 million acres. This decrease was due to the negative view of wetlands as wastelands - sources of mosquitoes, flies, unpleasant odors, and disease. In addition to the many wetlands that have been completely lost, others have been contaminated with chemicals, excess nutrients, and fertilizers that undermine their function and importance to a healthy environment.

Some wetlands function as flood control by storing and decreasing the velocity of excess water during heavy rainfall. As water flows into wetlands, it naturally loses velocity as it collects and continues to spread out. Wetland vegetation provides another natural barrier to fast moving water and therefore aids in flood speed reduction. The result of wetland activity during floods is often decreased damage to surrounding areas.

Flood waters slowed by wetlands, drop sediment among the roots and stems of the plants. This protects downstream bodies of water, preventing a build-up of gill clogging and egg damaging silt. Wetlands buffer shore lands against erosion because they are often located between water bodies and high ground. The roots of wetland vegetation bind the soil, putting a hold on it, while the plants themselves absorb the impact of waves.

Wetlands fed by groundwater further transport the water to streams that may otherwise dry up during warm summers or times of drought. Wetlands absorb water during the wet seasons and gradually release it during dry seasons, and can thereby refill aquifers and other drinking water supplies. Wetlands not only supply water, but cleanse it. When water enters a wetland, the wetland acts like a giant kidney, filtering out impurities before allowing the water to leave. The wetland vegetation plays a large role in this filtering system as it uses its roots and stems to trap and gather sediment comprised of both chemicals and nutrients.

There is more life in a one acre of a healthy wetland than there is in one acre of almost any other kind of habitat. Wetlands are havens for the endangered species of the United States; about 35% of all plants and animals listed as threatened or endangered in the United States either live in wetlands or depend on them in some way. The thick vegetation found in wetlands provides a safe haven and plentiful food supply for the young of many fish, crabs, and other small creatures that begin life in wetlands, remain safely until they are not so vulnerable, and move to open waters when the time comes. Many migratory birds visit wetlands in the fall and/or spring to feed while en route to their summer and winter destinations. A large number of birds nest and winter in wetlands as well, but the greatest bird populations are recorded during migration.

The many different varieties of wetlands have one common attribute - they are vitally important to the health of the planet. They should be treasured and protected, instead of drained and degraded as they have been in the past.

Eugene/Lane County is the home of many precious wetlands. For more information on Eugene wetlands visit The West Eugene Wetlands Education Center: http://www.wewetlands.org/

Sources and info provided by:
http://geochange.er.usgs.gov/sw/impacts/hydrology/wetlands/
http://www.epa.gov/bioiweb1/aquatic/importance.html