

Celebrating Environmental Action at Tufts



**STUDENTS AND STAFF MAKING A
DIFFERENCE**

Agenda



12:00 Lunch buffet

12:15 Welcome

12:25 Larry Bacow

12:30 Remembrance of Eco-Ambassador Susan Storm

12:35 Student Projects

1:00 Eco-Ambassador Projects

1:45 Group pictures

Welcome



Tufts University
Eco-Ambassadors



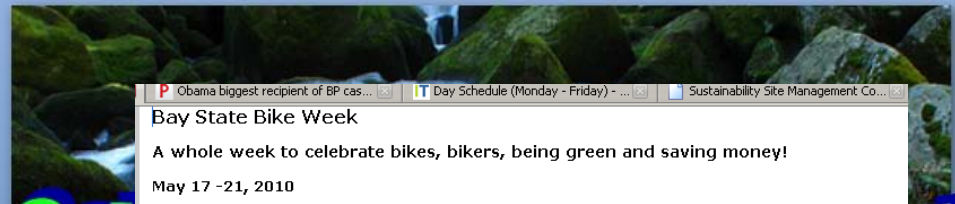
EXP-0046-S: Environmental Action: Shifting from Saying to Doing

*1.0 credit, Letter-graded,
Call#03937*

*Tuesday, 6:00-8:30 PM, Braker
226*

Eco-Ambassadors 2009-2010

- Recycling
- Green Events
- Energy
- Social Marketing
- Green Purchasing
- Water
- Commuting



As part of Bay State Bike Week Tufts is participating in Mass Commuter Challenge. All bicycling counts (not just commuting) during Bay State Bike Week. All you have to do is log in now and pledge the number of miles you plan on biking that week. The first 1,000 people that sign up are entered into a raffle to win an electric folding bicycle from [Pietzo!](#) And the business with the most miles in its category wins as well. Join Tufts' team, win prizes and help Tufts beat out all the other businesses! Sign up here: <http://masscommuterchallenge.org/>

Events happening at Tufts campus in Medford

Monday May 17th

Going green just got easier.

Click to see some of the many eco-friendly products available.



Sign Up

Bay State Bike Week Kickoff breakfast

Campus: Center Lower Patio
8-10 AM (also on Monday)

Get to know fellow bikers over coffee and doughnuts.
Register for the [Mass Commuter Challenge](#). FREE bike check-ups!

Tufts University Police Department will also be on hand to help you register your bike at Tufts, a practice that helps prevent theft.

Commuting Safely

Tuesday May 18th
Time and Location TBD





We are what we repeatedly do.

Excellence, therefore, is not an act but a habit.

Aristotle

In Remembrance



Student Initiatives



designsmartfortufts
presents

tufts goes trayless

pilot program

MARCH 28-APRIL 29

Trayless Dining



- **Exp 46: Environmental Action: Shifting from Saying to Doing. Fall 2009**
 - Research
 - Promotion
 - Strategy
- **Design Smart for Tufts. Spring 2010**
 - Collaboration
 - Trial
 - Data Collection
 - Report – poster presentation

Simple and Smart Designs Save: Dining Hall Trays Affect Energy Consumption

Callie Kolbe,¹ Alex Freedman,¹ Alice Pang,¹ Frances Wilburn,¹ Alex Shapiro,¹ Tina Woolston,²
Dallase Scott,² Negin R. Toosi,¹ Patti Klos,³ Robyn Gittleman⁴

College of Arts and Science,¹ Office of Sustainability,² Dining Services,³ and Experimental College⁴ at Tufts University

Rationale



- **In 2009:**
 - Carmichael Dining produced 24.28 tons of food waste
 - Used 365,520 KWH of electricity
 - Consumed 450 gallons of water per day for dishwashing
- **Trayless dining initiatives at other universities have:**
 - lowered resource consumption rates
 - Increased student awareness of environmental issues

Collaboration



- **Dining**
 - Dave Kelly
 - Rob Stefanik
 - Peter Kourafalos
 - Norman Yee
 - Patty Klos
 - TUDS staff
- **Energy Manager**
 - Betsy Isenstein
- **Students**
 - Tufts Mountain Club
 - Jumbo Janitors Alliance
 - TCU Senate
 - Exp 46 Class

Trial

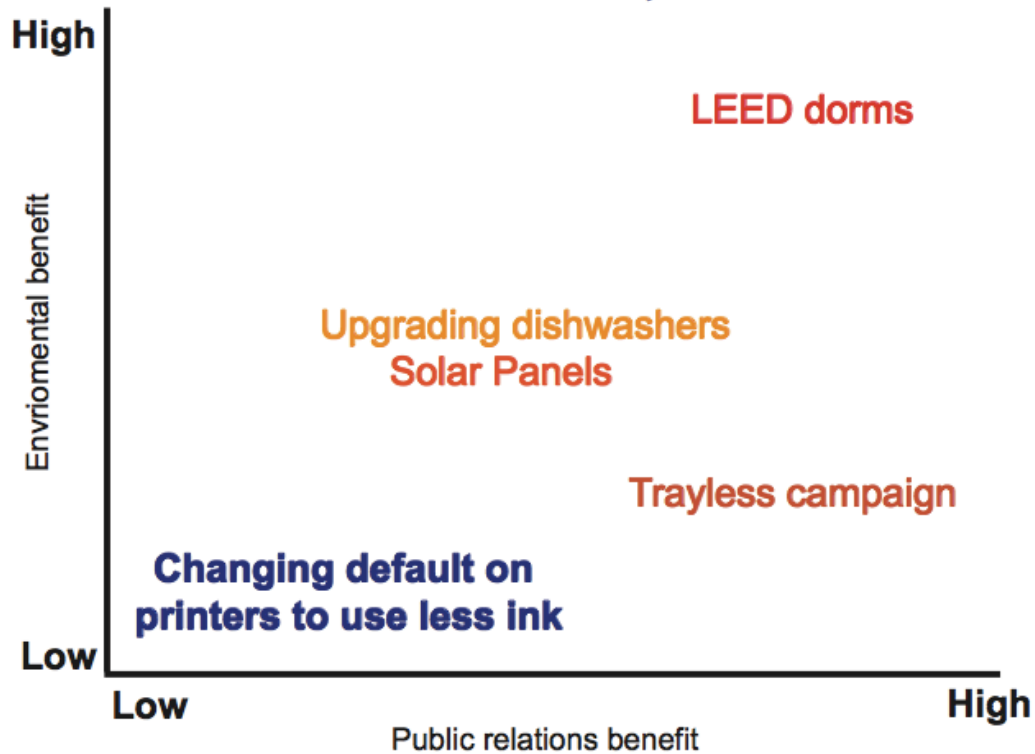


- **Two weeks – march 28 – April 9**
- **Energy consumption and food waste evaluated weekly**
- **Patron counts recorded**
- **Student perceptions surveyed**

Evaluation of benefits



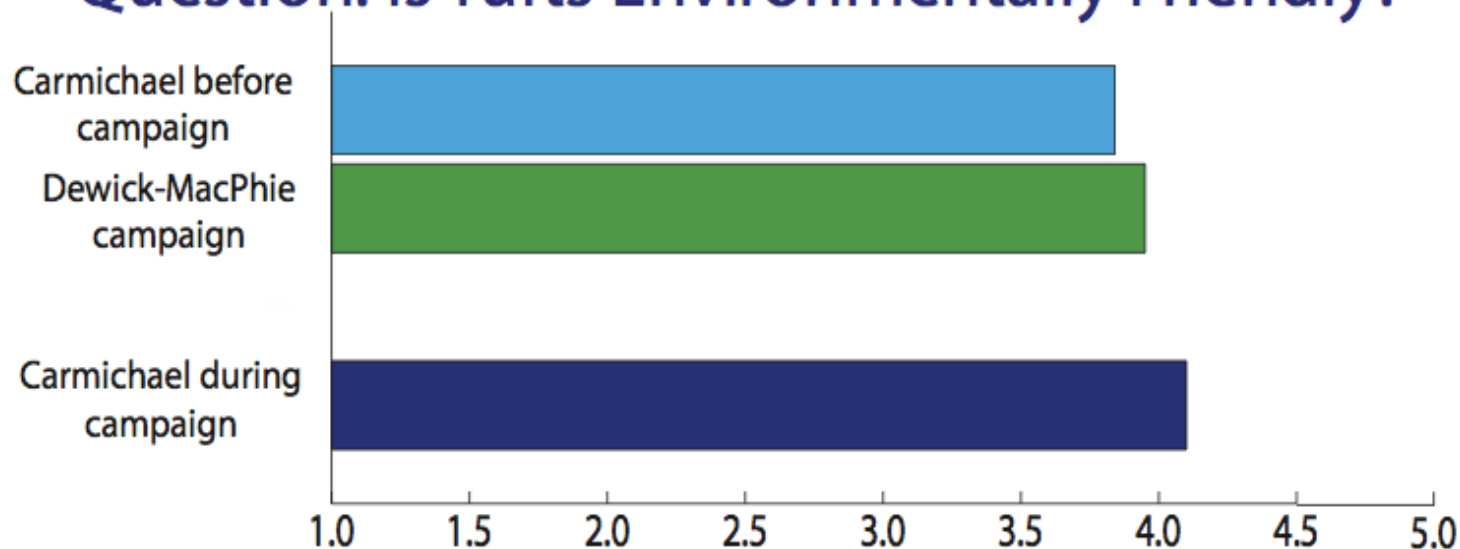
Approximate PR and Environmental Benefits of Various Environmentally Conscious Changes



Attitudes

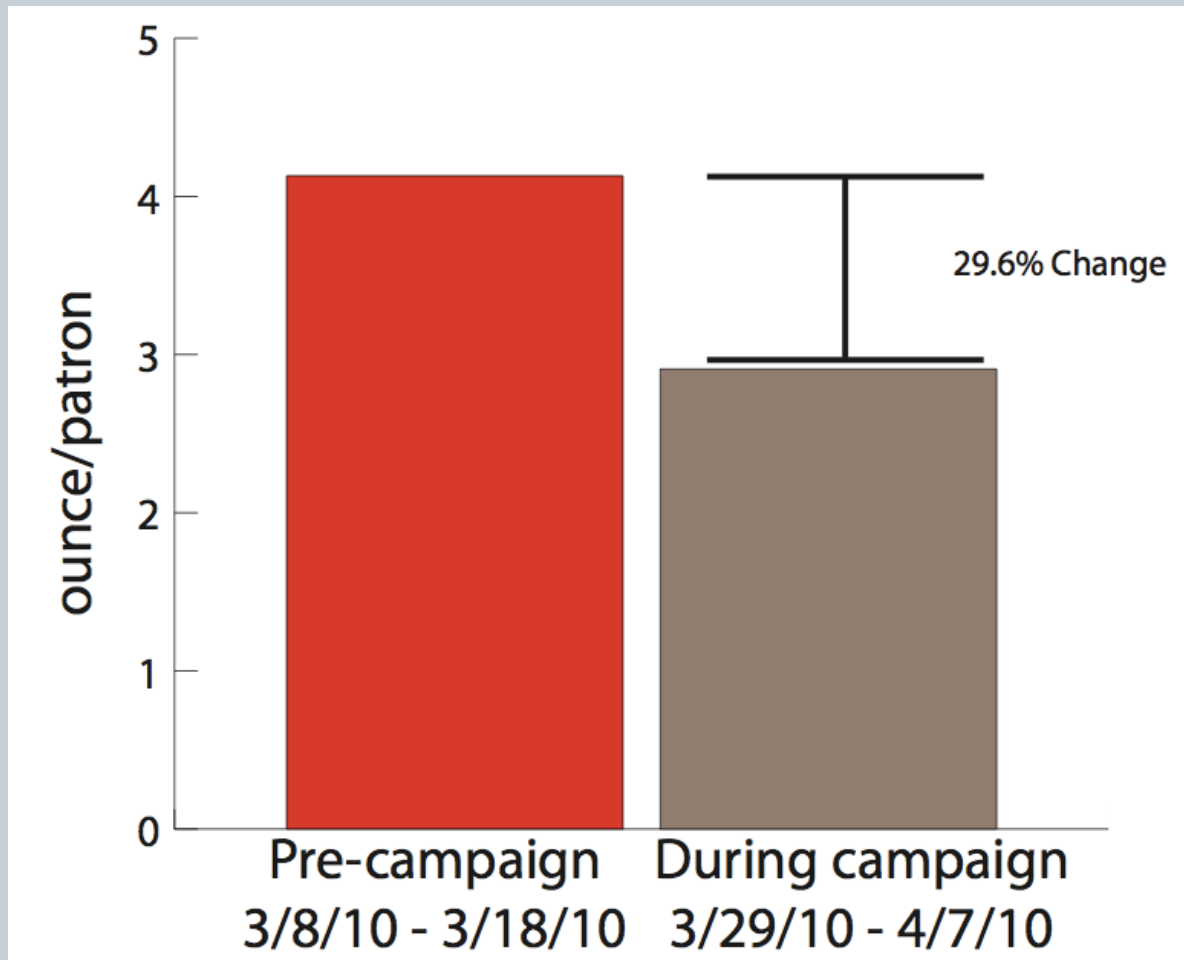


Question: Is Tufts Environmentally Friendly?

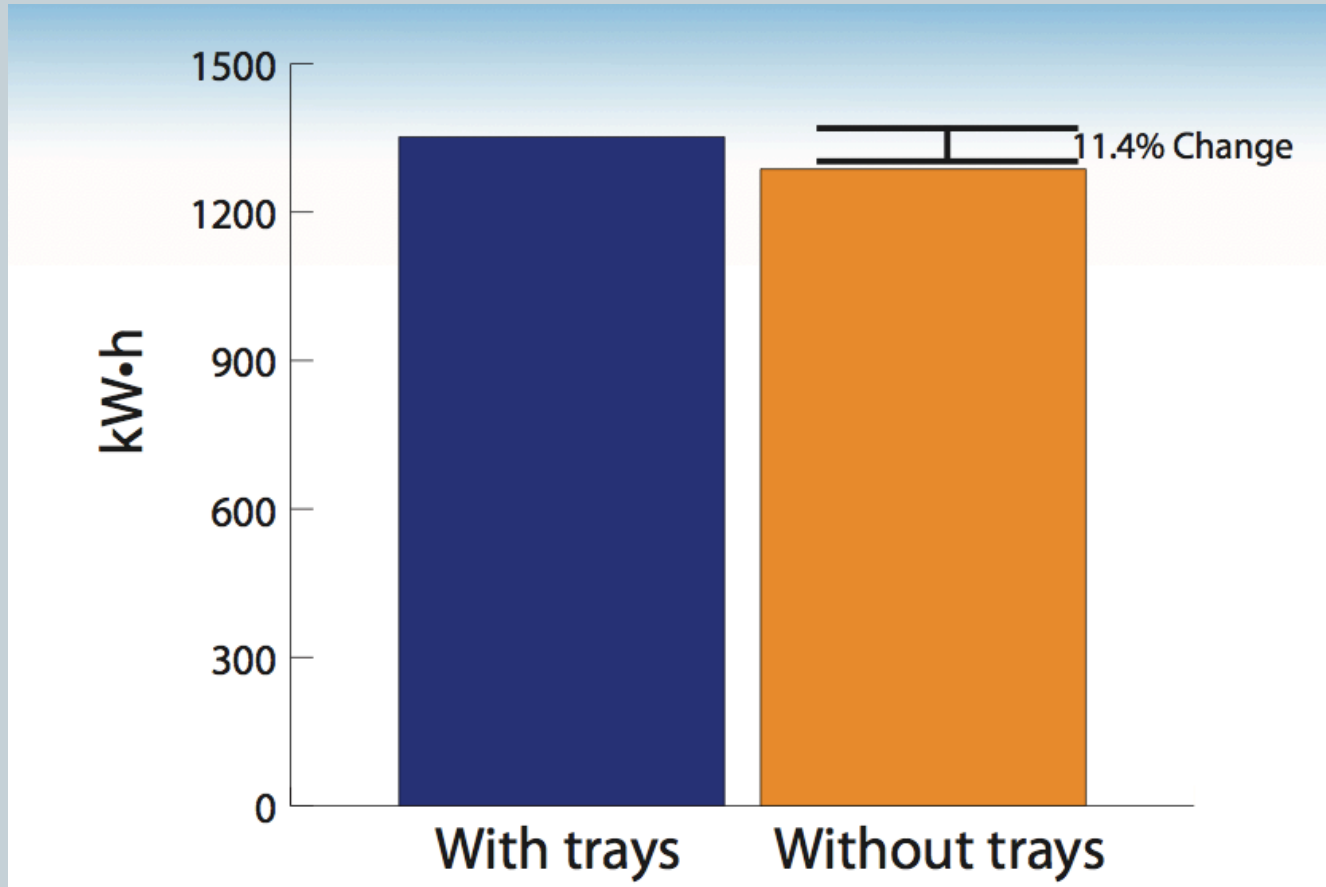


Graph showing comparison of student perception of environmental responsibility at Tufts. Trends are marginally significant between Carmichael before and during and Carmichael before and Dewick-MacPhie during, $t(161)=2.32$, $p=.02$ and $t(198)=1.73$, $p=.09$ respectively.

Average Food Waste Per Person (10 days)



Average Energy Consumed Per Day



Energy Savings



Energy Saved Per Month With Trayless Campaign

4928 kW·h



616 kW·h

In one month the energy saved by trayless dining could power the average home in MA for 8 months. (Avg. home in MA requires 616 KwH). (DoE)

Challenges



- **Administrative vs. Academic schedules**
- **Time constraints**
- **Source of energy for hot water**
- **Precision**
- **Water metering**
- **Deliberate skewing of data**

Student Initiatives



Exp. 46 Environmental Action: Shifting from Saying to Doing

Zero Waste Challenge

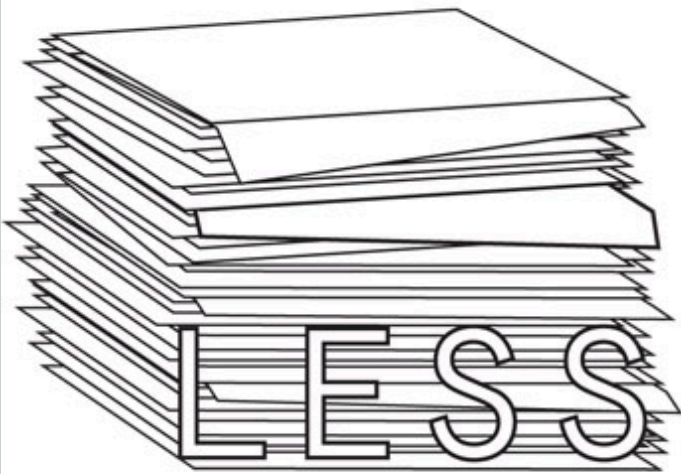


Paper Campaign



- **Campaign mission:** To reduce paper use at Tufts.
- **Campaign objectives:**
 - To set printers in major printing centers to default double sided.
 - To encourage professors to accept and grade assignments electronically or to request double-sided printing.

Posters

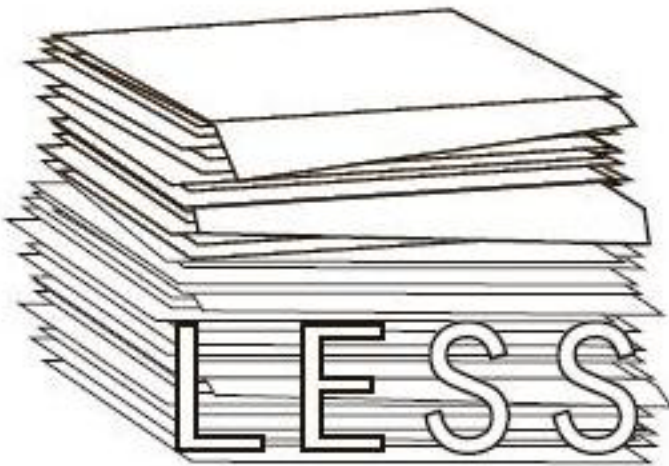


IS



MORE

Posters



On-line Pledge



Faculty Paper Pledge

Name, Department

I pledge to encourage students to print double-sided.

Yes!

No.

I pledge to include double-sided printing on my course syllabi.

Yes!

No.

I pledge to grade electronically when possible.

Yes!

No.

Unless
someone like
you cares a
whole awful
lot, nothing is
going to get
better.

It's not.



The Tisch Library Sustainability Team

Jess Warner, Laurie Sabol, Kris Thompson & Connie Reik



B.Y.O.P

Bring Your Own Place Setting



- We have encouraged staff to B.Y.O.P to all work events!
- Participation has steadily increased.
- Staff went from reusing plastic forks to bringing actual utensils, plates and mugs!

H2O

After many meetings, tastings, e-mails, blood, sweat & tears...



- Bottled Poland Springs water will be replaced with filtered tap this spring.
- We will continue to display signage encouraging reusable beverage containers at all dispensers.

Compost Bin

Downhill location



- Tisch Library is now host to the 2nd Community Compost Bin on campus!
- It is located on the loading dock at the back of the Library.
- TST members follow a monthly schedule for bin maintenance and weekly consolidation of our smaller kitchen bucket.

Earth Day Celebration

Spring Event



- Our work inspired the Tisch Special Events Team to celebrate Earth Day as our Spring Event!
- TST conducted a recycling survey of staff and presented it at the event.
- We also gave a presentation on Recycling Myths and organized an Eco-Challenge with full participation.

Created a Wiki Page



to post info, updates, and green
recommendations for Staff

<https://wikis.uit.tufts.edu/confluence/display/sustain/home>



Boston Campus



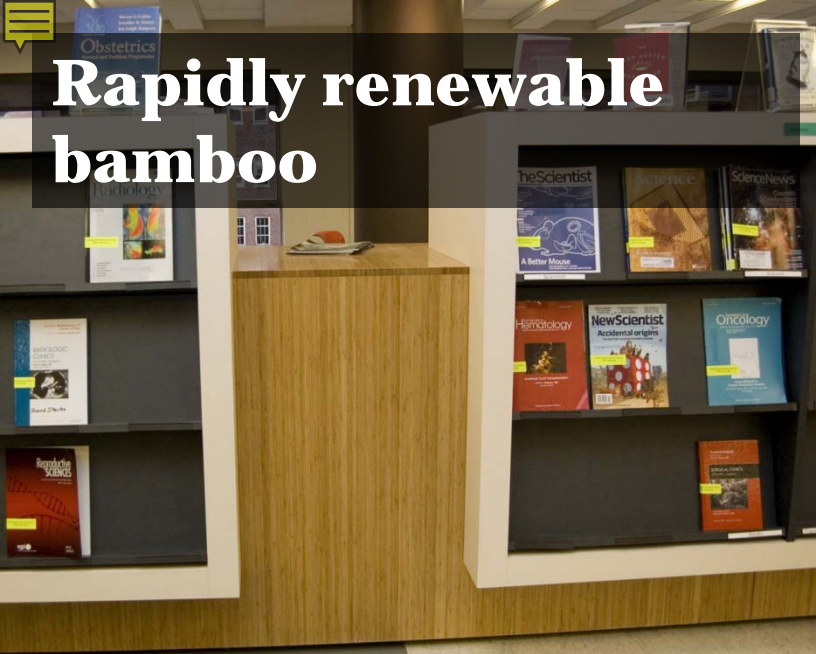


LIC HEALTH NUTRITION HIRSH
HEALTH SCIENCES LIBRARY
ROBIOLOGY ORTHOPEDICS BIO
TISTRY HEALTH COMMUNICATIO
RCH EVIDENCE-BASED M

**LEED Silver Certification in progress for Sackler
Center – 4th floor renovated 2008**



**Rapidly renewable
bamboo**



**Lights
automatically react
to brightness levels
in the room**



**Modular carpeting – no
glue!**



**Natural linoleum –
Linseed oil and wood
flour or cork dust**





**Water-Saving
Dual-Function Handle**
UP for #1 (liquid waste)
DOWN for #2 (solid waste)

Coated to prevent against germs

SLOAN

To installing the water-saving urinals with dual-function handle, the facility has recommended to purchase the urinal with the dual-function handle. For the urinal in use, the user should push the handle UP for #1 (liquid waste) and push the handle DOWN for #2 (solid waste) in the direction which the ball will move when UP or DOWN. The user should not touch the dual-function handle.

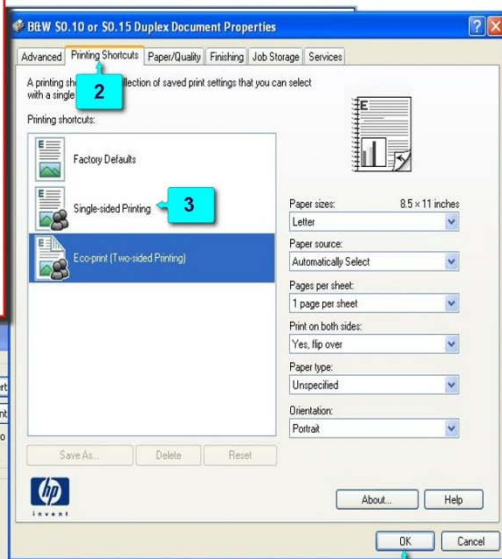
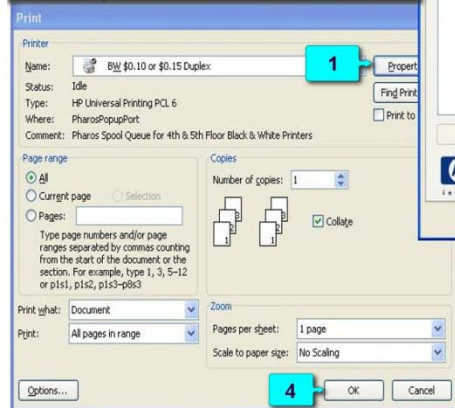






How printing defaults to two-sided but if you need single-sided do this:

1. Click the **Properties** button.
2. Select the **Printing Shortcuts** tab.
3. Select **Single-sided Printing**.
4. Click **OK** in each window to close and accept your settings.



Our greenest desktop ever

The OptiPlex 960



1 Configure a Baseline System



Brand: OptiPlex

Model: GX 620

Power Supply: Standard

	Type	Qty
Processor:	Pentium D	
Disk Drive / Storage:	Legacy	1
Graphics Adapters:	Integrated	0
Optical Drive:	DVDRW	1
Memory:	<= 2GB	
Power Management:	Default	

Annual Energy Used	295.22 kWh
Annual Energy Costs	\$29.51

2 Configure a Comparison System



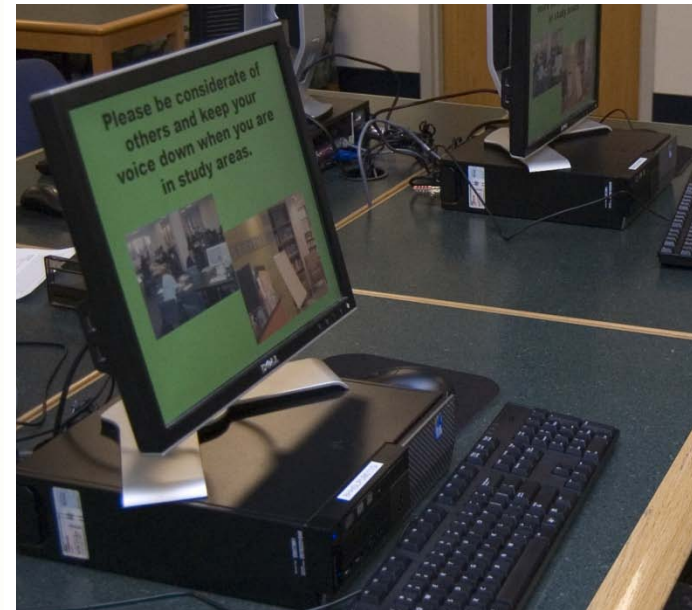
Brand: OptiPlex

Model: 960 SFF

Power Supply: High Efficiency

	Type	Qty
Processor:	E8XXX	
Disk Drive / Storage:	7200 RPM	1
Graphics Adapters:	Entry	0
Optical Drive:	DVDRW	1
Memory:	<= 4GB	
Power Management:	Default	

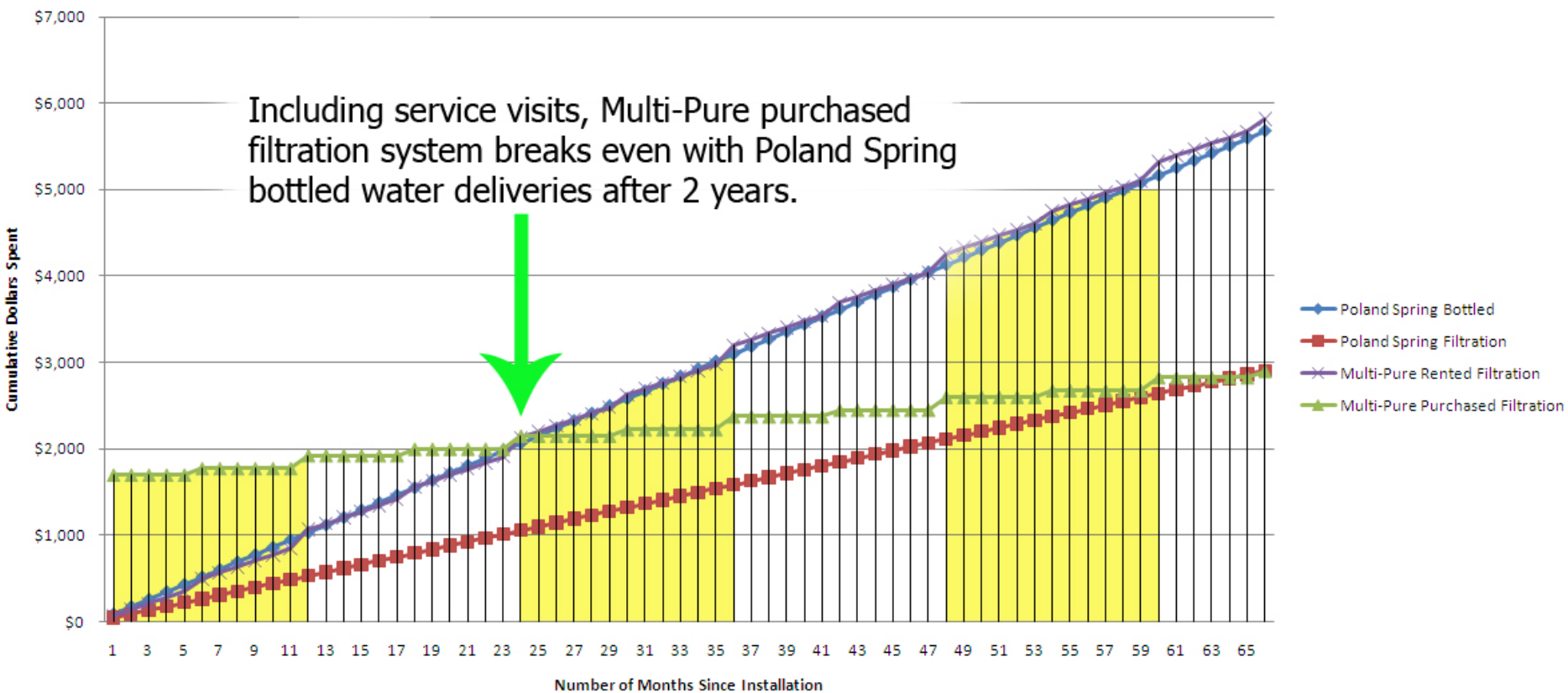
Annual Energy Used	173.06 kWh
Annual Energy Costs	\$17.30







PS Bottled Water vs PS Filtered Water vs Multi-Pure Filtered Water





Dishes with everything needed to wash and dry them

Reusable “My K-Cup” coffee filter for individual-serving coffee makers

Coffee from an eco-conscious New England company



Grafton Campus Recycling Awareness Project



This display was created to show members of the community what can be recycled at Tufts



Grafton Campus



- Recycling survey in 17 buildings
- Assigned staff to monitor the energy use in Admin bldg and “turn off” as needed
- Attractive display of recyclable items in Admin bldg
- Green Event for new students (Admissions)
- Encouraged greener practices in the Cafeteria
- Worked with Facilities to improve energy efficiency in Wildlife Bldg



Tufts Veterinary Emergency and Treatment Specialties going Green




**New 15,000-ft²
pet health care
center.**

**525 South Street
Walpole MA**

Tufts V.E.T.S.



- Improved sorting of recyclables with additional bins
- Re-negotiated waste disposal contract to include recycling (\$860.00 annual savings)
- Corrected undersized hot water coil in heating system
- Improved efficiency of heating with less fuel
- Propane savings YTD 2010 vs. 2009 = \$14,600.00



"I long to accomplish great and noble tasks, but it is my chief duty to accomplish humble tasks as though they were great and noble. The world is moved along, not only by the mighty shoves of its heroes, but also by the aggregate of the tiny pushes of each honest worker."

Helen Keller



Thank you Eco-Ambassadors!

Upcoming Events



MAY 17 – 21ST

Bay state bike week – events on all campuses

JUNE 1, 1:30 – 2:30 PM

Guided tour of LEED platinum Genzyme Center

JULY OR AUGUST

Guided tour of LEED Gold East Hall, WPI

Recycling plant tour – auburn!

Wind turbine tour