



**PACE**  
PARTNERS FOR A  
CLEAN ENVIRONMENT

### What is PACE?

PACE provides education outreach, technical assistance, and recognition for environmental achievement. The program is available at no cost to businesses in Boulder County. PACE offers:

- Assessments to identify opportunities for waste reduction, water conservation, and energy-efficiency
- Information and assistance to meet your business needs
- Compliance education
- Public recognition for your environmental efforts

### Why Participate?

**Compliance** – Our free, non-regulatory consultations help you comply with environmental laws and ordinances and reduce your liability.

**Cost Savings** - Less waste means lower disposal and operating costs. Efficient use of water, energy, and materials saves money.

**Public Image** - Environmental practices impact your image with customers, the community, and regulatory agencies.

### Public Recognition!

PACE publicly recognizes certified businesses through **free advertising**. This includes Internet listings and advertising in newspapers, magazines, utility bill inserts, and radio spots.

Certified businesses receive a PACE window decal and framed certificate. PACE encourages the public to support businesses that contribute to the community through environmentally sound operating practices.

# Water Conservations *Commercial Bathrooms*

Spring 2009

**Water efficiency** is great for the environment and for your business's bottom line. Water-efficiency measures can lower your water and energy bills as well as improve operations. Low-cost and technological opportunities abound for using water efficiently in commercial bathrooms. Demonstrating your commitment to water efficiency will make a positive impression on your staff and the public. Some of the measures listed below can likely be applied to your business. The table below illustrates the associate water savings and cost benefits. We can all do our part to use water more effectively, thereby improving water quality and preserving our drinking water resources.

				
<b>Low-Flow Aerator</b>	<b>Touchless Faucet</b>	<b>High-Efficiency Toilet</b>	<b>Waterless Urinal</b>	<b>Dual-Flush Flushometer</b>

### Table of Water Saving Options

Retrofit Measures	Water Savings (%)	Avg. Annual Cost Savings <sup>a</sup>	Payback Period	Additional Benefits
<b>Aerator<sup>b</sup></b>	75%	\$130	< 1 month	Low-cost and easy to install
<b>Faucet<sup>c</sup></b>	85%	\$140	3 years	Touchless faucets are more sanitary and have water-saving aerators pre-installed
<b>Toilet<sup>d</sup></b>	60%	\$540	< 1 year	Increased flush performance and longer life
<b>Urinal<sup>e</sup></b>	100%	\$225	2 years	No utility cost, low maintenance, improved hygiene, odor control, no major breakdowns
<b>Flushometer<sup>f</sup></b>	30%	\$70	< 1 year	New dual flush handle for commercial toilets and urinals; 1.1 (liquid)-1.6 gpf (solid)

<sup>a</sup>Calculated using Pacific Institute study "Waste Not, Want Not" for restaurant setting with 300 patrons & 20 staff/day; \$5.15 water and sewer costs and associated energy costs from gas (\$0.6/therm) hot-water heating

<sup>b</sup>Based on EERE FEMP Calculator-30 min use per day for 2.2 gpm versus 0.5gpm aerator (Savings of 18,600 gal/year)

<sup>c</sup>Based on 20 min use/day for self-powered touchless faucet with 0.5gpm aerator (Savings of 20,400 gal/year)

<sup>d</sup>Based on 150 flushes/day from current toilet average of 3gpf versus top model 1.1gpf (Savings of 103,500 gal/year)

<sup>e</sup>Based on 75 uses per day from conventional urinal average flush of 1.6gpf vs. waterless (Savings of 40,000 gal/year)

<sup>f</sup>Based on 75 water-saving liquid waste flushes per day at 1.1gpf versus 1.6gpf only (Savings of 14,000 gallons per year)

## High-Efficiency Toilets (HET)

(\$190-\$500)

- o HET flush at least 20% less water than a 1.6 gallon per flush toilet.
- o Top models use ½ gallon less water (1.1 gpf) and offer 4 times the flush performance, compared to a standard toilet.
- o Rebates are available in Boulder (\$75) and Longmont (\$100) for HET .
- o New toilets are performance and reliability tested to ensure customer satisfaction.



## Waterless or No-Flush Urinals

(\$250-\$400)

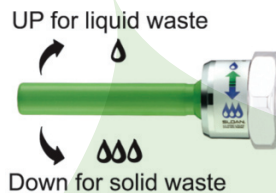
- o Require no water.
- o Maintenance is reduced, as there are no mechanical parts and no clogged drains to clean up.
- o Routine cleaning of surfaces is faster.
- o More hygienic since there is no flush lever to operate, and there is no mist created by flushing.
- o They provide improved odor control compared to traditional toilets, as the liquid sealant is designed to keep odors out of the restroom.



## Flushometer: Dual-Flush and Low Flow

(\$50)

- o Cost-effective retrofit.
- o Lifting handle up saves ½ gallon of water per flush.
- o Fast installation.



## Touchless or Self-Closing Faucets

(\$220-\$440)

- o Solar-, hydro-, or battery-powered, or hard-wire connection.
- o Easier to clean since there are less surfaces.
- o Hygienic - nothing to touch or turn on or off.
- o Saves water due to efficient aerators and automation.
- o Saves energy due to lower hot water heating demands.

## Aerators: Kitchen & Handsinks

(\$1-\$5)

- o Small investment, quick install, quick payback.
- o 0.5 gpm aerators for hand sinks.
- o 1.5 gpm aerators for kitchen sinks.



## Suppliers of Commercial Bathroom Equipment

Local Companies	Address	City	Phone	Toilets	Urinals	Flush-ometer	Faucets
Budget Home Center	780 Boston Ave	Longmont	(303) 678-8800	✓			✓
Hutter Wholesale	815 S. Jason St.	Denver	(720) 570-4488	✓	✓	✓	✓
Martz Supply Co.	5295 Vivian St.	Arvada	(303) 421 6665	✓	✓	✓	✓
McGuckin Design	2460 Canyon Blvd.	Boulder	(303) 449-3779	✓	✓		✓
Sutherlands	3390 Valmont Road.	Boulder	(303) 443-8891	✓			
Online	Website						
Air Delights	www.airdelights.com		(800) 440-5556	✓	✓	✓	✓
Low Cost Plumbing	www.lowcostplumbing.com		(800) 745-3990				✓
Home Center	www.homecenter.com		(800) 875-7999	✓			✓

## Helpful Resources

See the PACE website for a list of helpful resource sheets  
[www.pacepartners.com](http://www.pacepartners.com)

All references to products above by name, trademark, or manufacturer are for informational purposes only and do not represent an endorsement of any particular product or entity by the PACE Program.



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