

**Partners for a Clean Environment (PACE)
And**



Watershed Approach to Stream Health (WASH)

2004 Progress Report

**Prepared by:
Bonnie Greenwood, Bill Hayes, Pam Milmoe and Ron Shaw
Boulder County Public Health**

**Sarah Van Pelt
City of Boulder, Office of Environmental Affairs**

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1. Introduction

The **Partners for a Clean Environment**, or **PACE** Program, provides education and recognition for environmental achievement to businesses and municipalities in Boulder County and portions of Weld County. PACE is voluntary and non-regulatory. Pollution prevention (P2) education and technical assistance are offered at no cost to participants. The primary goals of the program are to minimize use of hazardous materials, improve energy efficiency and water conservation, decrease waste, and increase participation.

The city of Boulder Offices of Environmental Affairs and Water Quality, the city of Longmont Water/Wastewater Utilities and, beginning in 2004, the city of Louisville Wastewater Division provides input and funding to PACE to achieve water quality goals.

Beginning in 2003, the Watershed Approach to Stream Health (WASH) Project contracted with PACE to help businesses and municipal operations implement stormwater best management practices (BMPs) and prevent stormwater pollution, as required by the Clean Water Act stormwater regulations. Several municipal governments in the Boulder Creek and St. Vrain watersheds formed the WASH Project to cost-effectively meet stormwater regulations and the region's water quality needs. Participants include Boulder County, the cities of Boulder, Longmont and Louisville, and the towns of Superior and Erie.



Established PACE certification sectors include vehicle repair facilities, auto body shops, printers, dental offices, restaurants, retail stores, landscape professionals and manufacturers. In 2004, PACE piloted a new certification program child care centers. Some of these sectors consist of mostly small businesses that generate less waste than a large company, but collectively, they can have a large impact on the environment. Sector-specific criteria for participation in PACE were developed through PACE staff research and input from business and agency representatives. PACE sectors and focus areas include:

Vehicle Repair

- Solvents and cleaners - air emissions, hazardous waste, worker exposure, stormwater
- Waste antifreeze and oil filters - recycling, wastewater discharge, stormwater

Auto Body

- Solvents and paints - air emissions, hazardous waste, worker exposure
- Vehicle washing - stormwater pollution

Printing

- Press chemicals - air emissions, hazardous waste, worker exposure
- Paper products - solid waste, recycling

Restaurants

- Food and beverage containers - solid waste, recycling
- Fats, oil, grease, and cleaning water – wastewater discharges, stormwater pollution
- Energy and water use – resource use, air emissions

Dental Offices

- Silver, lead, and amalgam – wastewater discharges, hazardous waste
- Office products - solid waste, recycling, environmental purchasing

Manufacturing

- Process chemicals - air emissions, hazardous waste, worker exposure
- Energy and water use - resource use, air emissions, water and wastewater treatment

Retail Stores

- Packaging and office products – solid waste, recycling, and environmental purchasing
- Energy and water use - resource use, air emissions, water and wastewater treatment

Landscape Professionals

- Pesticides and fertilizers - worker exposure, stormwater pollution, and water quality
- Watering and irrigation – resource use and water quality

Child Care Centers

- Pesticides and cleaners – child and worker exposure, indoor air quality
- Radon, lead, mold, and carbon monoxide levels – indoor air quality

Municipal Operations with Stormwater Impact

- Stormwater pollution and water quality

Through the WASH/PACE partnership, PACE has incorporated stormwater criteria into the certification requirements for existing PACE sectors and developed stormwater criteria for all municipal operations that have the potential to impact stormwater. Municipal operations that do not have a corresponding PACE sector will be “WASH certified” when they meet all stormwater criteria. Although the education and outreach to these municipal operations focuses on stormwater protection, PACE staff provides pollution prevention, energy efficiency, and water conservation outreach as well.

The certification and recognition process varies, depending on the type of business or agency. Operational criteria or “checklists” are used to certify most PACE sectors. Retail stores and manufacturers must define and complete environmental projects to achieve and maintain certification. PACE certification for landscape professionals is a training certification program where individuals attend training seminars and complete an exam. PACE staff verifies that certified partners continue to meet the criteria through annual reports, visits, or phone calls.

To encourage environmental achievement, PACE provides personalized assistance, examples of successful local business approaches, vendor contact information, and peer references on specific products. A business or municipal operation that meets all criteria receives a plaque and a PACE window decal. As an incentive for participation, certified businesses receive free advertising throughout Boulder County. Advertising also educates the public about local businesses' environmental ethic. The reductions achieved by PACE businesses exceed what could be accomplished through a regulatory approach alone.



As the PACE Program has grown, staff has established working relationships with many local businesses and agencies. PACE is regarded as a valuable resource for waste reduction and pollution prevention information. This relationship is one of the many positive aspects of assisting businesses in a non-regulatory approach.

2. 2004 PACE Results

Business Contact and PACE Certification

Currently, 208 businesses and municipal operations are PACE-certified. Excluding manufacturers, 17% of Boulder County businesses and municipal operations in the target sectors are certified. In the city of Boulder, 27% are PACE-certified. Forty-six businesses became PACE-certified this year. In the city of Boulder, 24 out of 286, or 8%, of the uncertified businesses contacted this year became PACE-certified. Figures 1, 2 and 3 show the extent of PACE outreach in Boulder County as a whole, the city of Boulder and in the City of Longmont. The “Fleets” sector represents only the municipal fleets.

Figure 1. Business Participation – Boulder County

Over 80% of the PACE-targeted businesses in Boulder County have been contacted regarding the program with the exception of the largest sector, restaurants. **The total number of certified businesses increased 27% in 2004.**

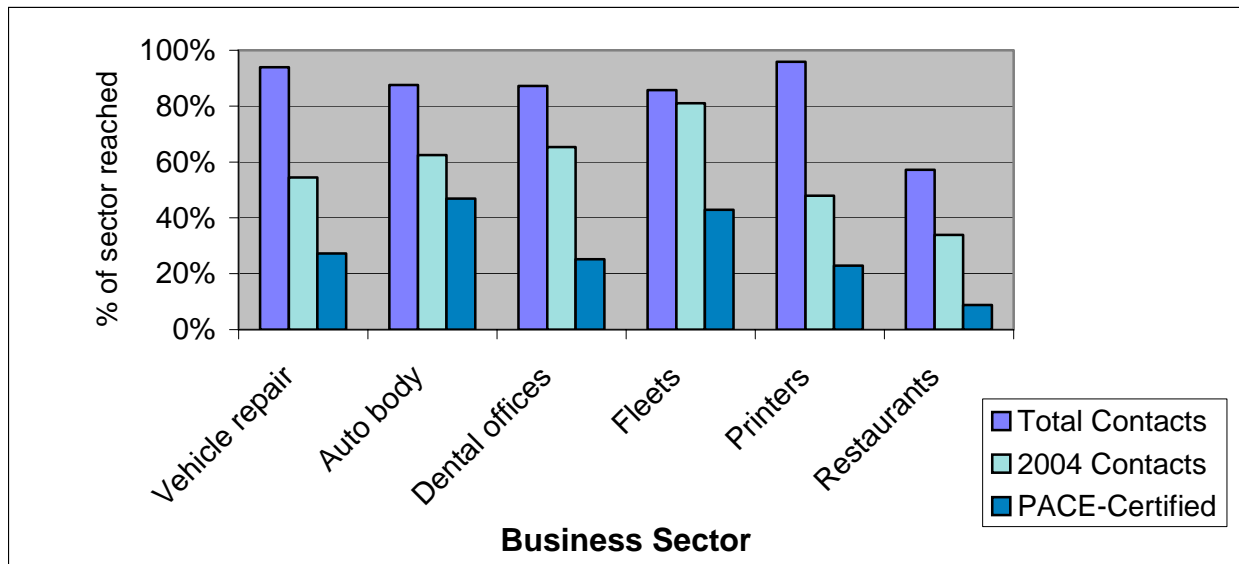


Figure 2. Business Participation – City of Boulder

Outreach over the past 10 years has focused on city of Boulder businesses. Approximately forty percent of the vehicle repair and dental offices and 80% of the auto body businesses in the city of Boulder are now certified.

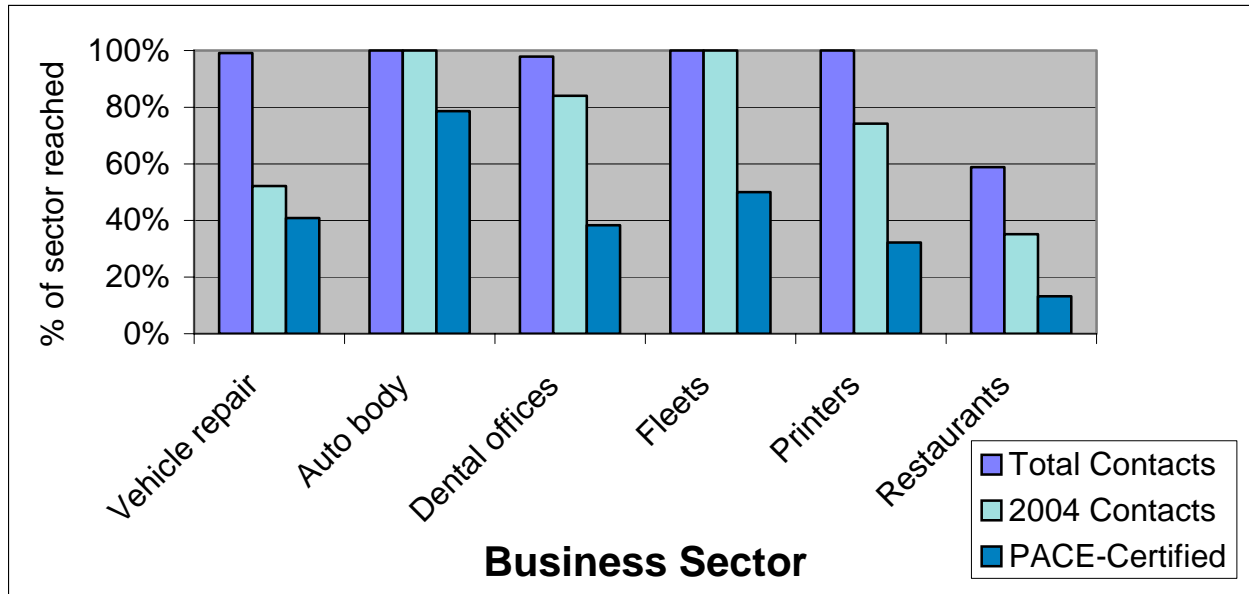
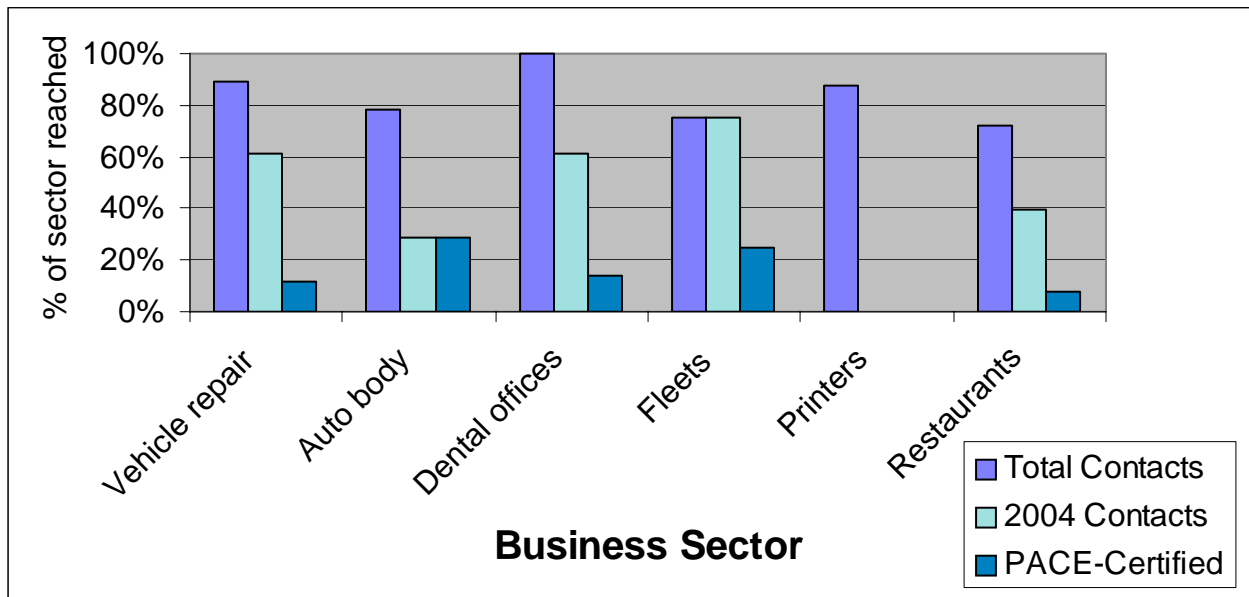


Figure 2. Business Participation – City of Longmont

The PACE program began outreach to businesses in the city of Longmont in 2003. This outreach has focused on the vehicle repair, auto body, dental, fleet and restaurant sectors. Nearly 75% of the businesses in these sectors have been contacted regarding the PACE program.



Pollution Reductions

The estimated waste reductions achieved by the businesses and municipal fleets up to 2004 are

summarized in Figure 3.

Figure 3. Estimated Annual Pollutant Reductions Achieved
(All sectors except manufacturers)

Pollutant Category	Type of Pollutant Reduced	Quantity
Air Emissions	Volatile organic compounds (VOCs) from thinners, solvents, inks, paints	30 tons ¹
Hazardous Waste	Solvents, brake cleaners, paint waste, amalgam	5,800 gallons ²
Solid Hazardous Waste	X-ray lead from dental offices	77 pounds
Solid Waste	Oil filters, avoided aerosol cans, paper, metal, and other materials	846 tons ³
Wastewater Discharge	Antifreeze discharged to sanitary sewer, fixer from film developing	39,900 gallons ⁴
<p>1 Estimated based on reductions in solvent use in auto and print shops, assuming approximately 6 pounds VOC per gallon. If data were not available, auto shops were assumed to have a 30-gallon solvents tank serviced (i.e., hauled for recycling) every six weeks.</p> <p>2 Estimated using shop information on quantities of solvents and paints hauled as hazardous waste.</p> <p>3 Estimated based on reported recycled cardboard, paper, metal, and oil filters, and aerosol cans avoided through bulk purchase. Assumed approximate weights of 1 pound per filter and 1/2 pound per can.</p> <p>4 Estimated based on reported recycling of antifreeze and fixer from film developing.</p>		

While no additional manufacturers became PACE-certified in 2004, current PACE manufacturers maintained their certification and completed new P2 projects. Manufacturers are required to report on projects completed the following year (i.e. in 2004 PACE Manufacturers report on projects completed in 2003. Figure 4 summarizes results from projects completed in 2003 by IBM Boulder, Roche Colorado Corp., Lexmark International, and SAE Circuits.

Figure 4. Summary of Pollution Reductions by PACE Manufacturers

Category	Reason for Reduction	Annual Reduction
Energy Use	Equipment replacement and energy efficiency	9.8 million kWh
Solid Waste	Source reduction, reuse, and recycling (paper, plastics, metal, batteries, wood, etc)	1704 tons
Volatile Organic Compounds	Source reduction / control technology	47 tons

Collectively the companies' air emissions are more than 70 percent lower than in 1995 when the city began tracking this information. Roche Colorado Corporation is the primary source of air emissions among the four companies and has reduced air emissions by more than 70 percent since 1995. In 2003 Roche's productivity increased by 54 percent and their air emissions decreased by 32 percent and the company predicts another decrease this year.

Hazardous waste generation has been a more difficult issue for many of the companies to address. Total hazardous waste volume increased by more than 90 percent last year. Each company aggressively pursues opportunities to reduce waste but when new products go online it often takes a few years to maximize waste reduction and recycling opportunities. Lexmark managed to reduce hazardous waste last year while waste volumes increased at both Ball Aerospace and Roche Colorado.

These four companies recycled 1,704 tons of paper, metals and other materials in 2003. That is equivalent to 13 percent of the total volume of recyclables collected from all residential and commercial customers served by the city’s primary hauler, Western Disposal.

With respect to energy use, each company seeks to reduce energy use and several choose to purchase renewable energy. Lexmark and IBM have demonstrated leadership in this area by completing numerous projects to reduce energy use in recent years. Adding energy use data to the annual reports will provide the city with useful information for tracking greenhouse gas emissions in the manufacturing sector.

Environmental Practices

PACE staff can have a large impact on a business’s environmental practices, regardless of whether the business is pursuing PACE certification. In 2003, PACE staff began tracking business action and behavior change with regard to awareness and compliance with environmental regulations, stormwater protection, recycling, hazardous materials use, energy efficiency, and water conservation. Figures 5 and 6 summarize business action taken since 2003 as a result of PACE outreach.

Figure 5. Business Environmental Compliance After PACE Contact

Environmental Concern	Number of Businesses Now in Compliance
Automotive businesses disposing antifreeze down the drain	10
Automotive businesses disposing aqueous parts washer waste down the drain	1
Automotive businesses with outside storage that is a potential stormwater concern	12
Dental offices improperly disposing of mercury amalgam, x-ray fixer, or x-ray lead	21
Restaurants not maintaining grease traps properly	11

Figure 6. Business Environmental Practices After PACE Contact

Environmental Practice/PACE Criteria	Number of Businesses that Changed Practices
Automotive businesses using non-chlorinated (less hazardous) brake and carburetor cleaner	2
Dental offices using recycled-content office paper	12
Restaurants using less hazardous cleaning products and keeping material safety data sheets (MSDS) on file	6
Recycling of mixed paper, cardboard, and/or commingled containers	20
Water conservation	3

PACE Certification for Landscape Professionals

Three new individuals became certified which brings the total number of certified landscaper to six. The partnership with the Boulder County Cooperative Extension and the City of Boulder Water Conservation Office has been pivotal to sustaining this program.

Individuals interested in pursuing PACE certification are required to attend training on sustainable landscape practices, complete a take-home exam with at least 70% correct, and complete a survey of how they integrated sustainable landscaping into recent projects. To maintain certification, individuals must complete the survey and two hours of relevant continuing education annually. Certification is available to landscape professionals working for a government agency or a private business located in Boulder County.

The Sustainable Landscaping Resource Manual provided to all landscape professionals pursuing PACE certification was made available on the PACE web site.

PACE Certification for Retail Stores

Fifteen retail businesses were contacted by PACE staff in 2004. Although no retail businesses completed the certification process, several benefited from the site visits and educational material. PACE staff will continue working with the interested businesses contacted in 2004. The types of businesses PACE staff are working with include an imaging and copy center, flower shop, book store, bike shop and natural food grocery stores.

The flexibility built into the certification materials allowed for a variety of environmental impacts to be addressed at various sites but also required additional assistance. It was found that the majority of the businesses contacted did need the additional hands-on assistance from PACE staff and that the originally conceived “self-certification” concept was not feasible. Similar to other PACE sectors the outreach to retail businesses required a site visit to introduce the program and walk through the facility to identify areas of concern.

PACE Certification for Child Care Centers

PACE has streamlined the indoor air quality assessments and incorporated chemical management and resource conservation into the PACE outreach message for child care centers. Proper chemical storage was the most prevalent problem noticed in site visits this year and will require additional education and implementation assistance. A variety of non toxic cleaning products and compact fluorescent light bulbs have been purchased and will be distributed to participating child care centers in 2005.

Energy Efficiency Assistance

The PACE program is helping businesses reduce their energy costs and improve their energy efficiency. PACE applied to participate in Xcel Energy's Custom Efficiency Program. The Custom Efficiency Program is a demand-side management (DSM) program that awards rebates for the installation of energy efficient measures, such as efficient lighting and HVAC equipment, in order to reduce summer peak demand. Staff visited 55 local businesses and evaluated lighting, provided retrofit recommendations and energy efficiency information. Eleven businesses have participated in the program thus far, with three more projects to be completed in January 2005. The businesses include restaurants, office space, retail space, hotel and assisted living facilities, an apartment building, and a church. Collectively, energy efficient lighting will save the participants approximately \$104,000 in annual energy costs. The total initial investment from the businesses was \$40,898, giving a benefit-to-cost ratio of 2.5:1. The average payback for projects in this program was just over 1 year.

The PACE program also organized two compact fluorescent light bulb (CFL) giveaways. During the first giveaway residents could pick up CFLs at the recreation centers, the city of Boulder Utility Billing Office and the Transportation Resource Center. A total of 1,200 bulbs were given away at a cost of \$3,000 to the city. The second CFL giveaway used booths at local grocery stores to distributed free 15-watt compact CFLs and energy efficiency information to area residents. The events were part of ENERGY STAR's® fifth annual "Change a Light, Change the World" campaign and were jointly sponsored by Whole Foods and Ideal Market. Grant and sponsor funds were used to purchase bulbs. PACE program funds were used for event marketing.

PACE also received a grant from the Xcel Energy Foundation to host a halogen lamp swap event in November. At the event, residents were invited to turn in a halogen lamp and receive a lamp with a 3-way compact fluorescent light bulb for \$10. The objectives of the event were to raise awareness about the inefficiency and fire hazard of halogen floor lamps and promote energy efficient lighting and the city's energy initiatives.

About 250 lamps were exchanged, generating annual total cost savings of about \$9,000 and reducing GHG emissions by approximately 80 mtCO_{2e}. Lifetime savings of the CFL will be approximately \$45,000 and 400 mtCO_{2e}. While the savings and emissions reductions are relatively low, the event helped engage the public in energy issues and strengthen relations between the city and the public.

3. 2004 PACE Outreach Summary

In addition to site visits, contacts, and new certification development for Boulder County businesses, PACE staff conducted outreach and education to reach an even broader audience as listed below.

Events and Workshops

- Car Care Clinic in April 2004. The clinics were held in both Boulder and Longmont. Volunteers checked 38 cars at the Boulder event and 44 cars at the Longmont event. Vehicle owners learned about the environmental and cost benefits of maintaining their cars. The Boulder County clinics were part of a larger Regional Air Quality Council (RAQC) effort at seven sites in the Denver metro region. The RAQC checked gas caps at all sites, and the Boulder Rotary performed child seat safety checks at the Boulder site.
- National Pollution Prevention Week - PACE staff compiled pollution prevention tips for a press release and distributed them throughout Boulder County and city of Boulder offices.

Presentations

- Presentation at the Chamber of Commerce for business owners concerning stormwater ordinances and how the PACE program may assist.
- Presentation on the PACE program to the Boulder Green Building Guild
- Presented to five 6th grade classes on energy conservation at Casey Middle School.
- Presentation on the PACE program to the Boulder County Dental Association

Educational Materials and Outreach

- PACE material was distributed at the Pride Fair, the Boulder Chamber of Commerce EXPO and the Boulder County Fair
- New "PACE Intro" and "We Are PACE Certified" brochures were provided to certified businesses to explain the PACE program to their customers.
- One issue of the *PACE Update* newsletter was distributed to more than 1,000 businesses.
- List of PACE certified businesses distributed to the Boulder Race Series participants.
- Participated in a Daily Camera interview with a PACE partner for an article on the PACE dental program.
- Mailed Daily Camera article on PACE dental program to dentists to demonstrate the program's effectiveness and public awareness
- Coordinated with grease recycler to put storm water quality messages on invoices
- Revised fact sheets:
 - Updated the dental resource sheets
- New fact sheets:
 - Amalgam separator resource sheet
 - Environmental Practice for Retail Stores (general)
 - Environmental Practices for Auto Repair (general)
- Ongoing advertisements on local radio stations, in the Chamber of Commerce newsletter, and in the newspaper.
- Press releases to identify newly certified PACE businesses that described their P2 accomplishments.

4. 2005 PACE Goals

Business Outreach

The PACE program is currently hiring to replace a staff member at BCPH. The position will be filled before the second quarter with someone who is enthusiastic and experienced in the necessary areas to continue an equivalent level of outreach in 2005 that has been achieved in the past.

Specific projects targeting water and energy efficiency are being developed to offer immediate savings for the business while reducing the amount of resources consumed. One project will offer water efficient pre-rinse nozzles to restaurants at no cost. The nozzles use half the amount of hot water which also reduces the businesses' water heating costs. In-depth site visits, going beyond the standard PACE criteria and utilizing PACE staff expertise, will also be available to interested businesses to help them improve their environmental performance further. PACE staff will work with local trade schools to incorporate environmental practices into their curriculum. Other 2005 efforts will focus on program marketing and improving resources. Improvements will be made to the PACE web site.

Staff will continue to check in annually with PACE-certified businesses and help other businesses take action to achieve certification. Staff will contact mostly Boulder, Longmont and Louisville businesses through PACE contract funding from these cities. Additional businesses within the WASH Project area will be contacted regarding stormwater protection and PACE certification.

PACE Certification for Landscape Professionals

The spring training course is in development. The two day class will satisfy the entire PACE certification training requirement. Individuals attending both days of this class need only to complete the exam and survey to become PACE certified. The City of Boulder Fall Symposium may then be used as continuing education credit in order to maintain certification. The course flyer will go out to all attendees of either the spring or fall trainings last year, with a special note about their eligibility for PACE certification, what is involved to become certified, and the benefits. The flyer itself will also include PACE certification information.

PACE Certification for Child Care Centers

BCPH staff plan to complete the PACE certification of the six pilot child care centers and apply the refined PACE message to three new child care centers. Activities in 2005 will include:

- Test for lead and develop remediation plans as necessary based on the test results.
- Provide information on the long-term radon tests and develop mitigation suggestions as necessary based on the test results.
- Conduct site assessments to assess mold environment, combustion equipment function, and chemical and pesticide storage.
- Assess and address chemical storage safety issues observed on the properties
- Distribute samples of non-toxic cleaning products, eco-friendly disposable cups and trash bags and energy efficient light bulbs.
- Work with Centers to identify energy efficiency and water conservation projects.
- Following up with Centers to ensure that remediation takes place, recommendations are implemented, and indoor air quality issues are resolved.

Events and Workshops

PACE staff will continue to participate in events that have been successful over the past few years. By working more closely with business and trade associations throughout Boulder County program staff hope to increase knowledge of the program as well as demand for assistance. PACE is also planning on working directly with the Boulder Valley vocational schools to educate the students on the environmental impacts of their future trades and to also improve the environmental health conditions of their class rooms.

5. 2004 WASH/PACE Results

Stormwater regulations call for implementation of six minimum control measures (MCM) to address the impact of stormwater runoff on water quality and stream health, including: 1) Public Education and Outreach, 2) Public Participation and Involvement, 3) Illicit Discharge Detection and Elimination, 4) Construction Site Stormwater Runoff Control, 5) Post-construction Stormwater Management, and 6) Pollution Prevention and Good Housekeeping for Municipal Operations. The WASH / PACE partnership focuses on MCM 3 and MCM 6.

MCM 3 – Illicit Discharge Detection and Elimination

This portion of the WASH / PACE Project focuses on educating the commercial sector about stormwater pollution and best management practices (BMPs) they can follow to prevent stormwater pollution. The approach and tasks completed in 2004 are summarized below.

- 1) Developed Outreach Strategy and Program Materials for Business Sectors Outside of the PACE program. These included pressure washers, golf courses, do-it-yourself auto parts stores and equipment rental stores. Rental stores were identified later in the year as a potentially significant, new non-PACE sector that required WASH / PACE assistance. Work with these new businesses sectors included:
 - Contacted businesses to discuss the upcoming ordinances and stormwater impacts and to gather feedback on effective messages for outreach material.
 - Researched, developed and reviewed appropriate BMPs and an outreach strategy that will achieve WASH goals.
 - Initiated discussions with state and regional parties on the differing perspectives of what pressure washer BMPs would be required and enforced outside the WASH area.
 - Created a design format for outreach materials to be used for non-PACE business sectors. Incorporated outreach content and printed material for distribution in 2005.

- 2) WASH / PACE Site Visits. In 2004, we added stormwater assessments with PACE sector businesses likely to have stormwater impacts (i.e., restaurant, auto body, and auto repair). Site visits provided one-on-one technical assistance to educate businesses, identify stormwater impacts, and identify low cost solutions.
 - Reviewed stormwater criteria during site visits
 - All businesses contacted or recertified in 2004 were given the stormwater criteria and were required to adopt the BMPs in order to be certified.
 - Twenty-seven (27) new businesses were WASH / PACE certified in 2004 in the vehicle repair, auto body and restaurant sectors. Eighty-six (86) businesses were recertified with the WASH / PACE criteria in 2004.

- PACE has provided one-on-one compliance assistance on the new stormwater program requirements to approximately 42% of all the businesses in these sectors.
- In addition to the vehicle repair, auto body and restaurant sectors, nine (9) retail site visits were conducted in Boulder and Superior (8 in Boulder and 1 in Superior).
- Refer to Figure 1. for a breakdown of visits completed.

Figure 1. 2004 Stormwater Outreach to Businesses

Jurisdiction	Vehicle Repair and Auto Body		Restaurants	
	Total Businesses ¹	WASH Contacts	Total Businesses ¹	WASH Contacts
Boulder County (Gunbarrel, Hygiene, Niwot)	3	1	18	9
City of Boulder	131	65 ²	268	92 ²
City of Longmont	82	52 ²	188	78 ²
City of Louisville	8	7	50	6
Town of Erie	4	2	10	8
Town of Superior	1	1	9	6
Total WASH Area	229	128	543	199
<p>¹We have not identified all businesses in Boulder County Unincorporated areas. We will identify businesses in the field using the WASH map showing urbanized unincorporated areas.</p> <p>²The cities of Boulder and Longmont have contracted with PACE for pollution prevention business outreach. As a result, a larger proportion of businesses in these municipalities received WASH information along with their PACE contacts.</p>				

- 3) Coordinated Materials Development with the WASH Educational Team.
 - Door stickers to educate business staff (restaurants, groceries, auto facilities) to never dump wastes on the ground or down a storm drain, and to help individuals understand that the storm drain connects to the surface water were designed and printed. Stickers were distributed by PACE and Boulder County Food Safety staff during site visits.
 - Printed copies of the “After the Storm” brochure to distribute to businesses. Future reprints of this brochure will focus on storm water concerns of the general public (lawn care, pet waste, septic systems, and what they should expect from businesses). WASH / PACE brochures and resource sheets will be used to address stormwater BMPs for businesses managers.
 - Provided input on Joe and Flo, tributary sign design, and other educational concepts.
 - Created WASH / PACE “look” for PowerPoint presentations and web page design.
- 4) Developed Public Education Materials for PACE Sectors.
 - The Spring 2004 PACE Newsletter features Joe and Flo as a way to improve brand recognition. The article also provides an overview of the program with special focus on restaurant and auto repair/body.
 - Assisted public education effort by asking business staff to identify and label the nearest storm drain to their business with a storm drain curb marker.

- Mailed WASH / PACE specific letters to restaurants, auto body and auto repair establishments explaining the new stormwater ordinance.
 - PACE staff developed a brochure to introduce the program to PACE business customers and the general public. WASH supported printing costs.
- 5) Coordinated Boulder County Pollution Prevention Programs and Supported Marketing Efforts.
- Prepared and presented the WASH / PACE program during the Stormwater Session of the National Pollution Prevention Roundtable held in Baltimore in April.
 - Aligned changes to the strategy of the PACE program with the WASH / PACE activities.
 - Contributed content to and participated in the presentation describing the WASH and PACE program efforts for the public meeting held Sept 30th.
 - Held monthly meetings with the WASH Project Coordinator to evaluate goals and measure progress.
 - Created PACE logo design to better capture WASH partner participation and emphasize PACE as the one brand to be used for all outreach to businesses.
- 6) Upgraded and Enhanced WASH / PACE database
- Worked with contractor to oversee and implement changes to the WASH / PACE database. The following upgrades were made:
 - ✧ Updated the system from ACCESS 1995 to ACCESS 2003
 - ✧ Added stormwater criteria
 - ✧ Improved the data entry and query functions for site visits
 - ✧ Developing the ability to track and generate reports on site specific comments of deficiencies

MCM 6 – Pollution Prevention and Good Housekeeping for Municipal Operations

This portion of the WASH/PACE Project focuses on identifying potential stormwater concerns in municipal operations and training municipal employees on best management practices (BMPs) they can follow to prevent stormwater pollution. The approach and tasks completed in 2004 are summarized below.

- 1) Identified and prioritized “Tier 2 Sources” based on number of facilities, number of stormwater polluting activities identified, acreage, distance to surface water, and the percent of impervious surface on-site. Tier 2 sources are a group of facilities or operations with the next highest potential to pollute stormwater that were not designated as “Priority” or Tier 1 operations.
- The prioritized Tier 2 municipal operations are
 - ✧ Fire Departments
 - ✧ Buildings & Facilities Maintenance
 - ✧ Recreation Centers
 - ✧ Swimming Pools (not within a rec. center)
 - ✧ Solid Waste Transfer/Recycling Centers
 - Different strategies were identified for PACE certification programs of Tier 2 operations.
 - ✧ Focus Groups – Fire Stations, Facilities Maintenance

- ✧ Site Visits – Fire Stations, Rec. Centers, Pools, Transfer Centers
 - ✧ Mail resources – Transfer Centers, Facilities Maintenance
- 2) Conducted Site Visits for all Priority (Tier 1) Operations.
 - Follow-up letters were sent to each operation after the site visit, noting the practices that were already in place to protect stormwater and the potential stormwater impacts (BMPs/PACE Criteria not followed) that need to be corrected to achieve PACE/WASH certification. At the end of the year, sent second follow-up letter, reminding operations of the deficiencies identified and requesting that the operation submit an action plan detailing how they will address the deficiency by 2006. WASH Steering Committee members received copies of all correspondence and a summary of the deficiencies identified in their area. The most common deficiencies observed (BMPs not followed) were:
 - ✧ Vehicle Washing area not plumbed to sanitary sewer
 - ✧ Lack of Spill Prevention and Control Plans
 - ✧ Uncontained storage of salt/sand
 - ✧ Spills at fueling area and no spill kits at fueling islands
 - ✧ Uncovered outside containers and materials storage
 - 1) Conducted Stormwater Training for Municipal Operations.
 - Developed *PowerPoint* presentation and distributed PACE Resource Sheets
 - 2) Participated in strategic planning meetings and provided quarterly updates to WASH Steering Committee.
 - 3) Designed and distributed Stormwater Pollution Prevention Plan Binders to all Tier 1 operations.
 - 4) Participated in script development of a training video incorporating key messages and BMPs for municipal operations and reviewed first and final editions of video. The video will be provided to all priority operations employees in 2005 to use as part of their new-employee or regularly scheduled employee training.

6. 2005 WASH/PACE Goals

MCM 3 – Illicit Discharge Detection and Elimination

- Implement the outreach strategy and distribute the educational materials for the 4 non-PACE sectors developed in 2004. The focus will be on ensuring the BMPs are being adopted and are effective.
- Commercial facilities and rental store outreach materials will need more development prior to implementation.
- Continue WASH / PACE site visits to provide stormwater education and WASH certification for the vehicle repair, auto body, restaurant and retail businesses in the WASH Project area.
- PACE staff will use the new capabilities of the database to track and report business's conformance with WASH BMPs.
- In-depth guidance will be available to businesses in need of specific stormwater

- compliance assistance.
- Incorporate Tier 2 educational materials into private/commercial sector (ex. Facilities Management).

MCM 6 – Pollution Prevention and Good Housekeeping for Municipal Operations

- Conduct follow-up site visits or phone visits of Tier 1 operations based on pre-determined criteria.
- Distribute municipal video to Tier 1 operations with reminder letter of criteria requirements.
- Conduct training sessions/follow-up meetings to selected Tier 1 operations (this may coincide with IDDE Training for each municipality).
- Conduct Focus Groups for Tier 2 operations and determine final PACE Certification Criteria/BMPs.
- Develop educational materials and PACE Certification Criteria for Tier 2 operations.
- Conduct initial site visits for Tier 2 operations (fire stations, facilities maintenance departments, rec. centers, pools, and transfer/recycling centers).