

# Keep it Clean Partnership



## **Stormwater Protection**

BOULDER • BOULDER COUNTY • LONGMONT  
ERIE • LAFAYETTE • LOUISVILLE • SUPERIOR

[KeepItCleanPartnership.org](http://KeepItCleanPartnership.org)

## 2011 Annual Report



**KEEP IT CLEAN  
PARTNERSHIP**

3450 Broadway, Boulder, CO 80304 • Phone: 303-441-1439 • Fax: 303-441-1468 • E-mail: [jlopitz@bouldercounty.org](mailto:jlopitz@bouldercounty.org)



# **Keep it Clean Partnership ANNUAL REPORT for 2011**

## **TABLE OF CONTENTS**

<b>Executive Summary .....</b>	<b>1</b>
<b>Background, Partnership Overview, and 2011 Highlights .....</b>	<b>5</b>
<b>KICP's Approach to 2011 .....</b>	<b>11</b>
<b>Future Watershed Considerations .....</b>	<b>11</b>
<b><u>2011 Activities</u></b>	
<b>Public Education and Outreach .....</b>	<b>17</b>
<b>Public Participation .....</b>	<b>28</b>
<b>Illegal Discharge and Elimination .....</b>	<b>30</b>
<b>Construction Runoff Control .....</b>	<b>39</b>
<b>Post-Construction Management .....</b>	<b>43</b>
<b>Pollution Prevention and Good Housekeeping for Municipal Operations ..</b>	<b>46</b>
<b>Partnership Working Agreement .....</b>	<b>52</b>
<b>Partner Contact Information .....</b>	<b>53</b>



**KEEP IT CLEAN  
PARTNERSHIP**

3450 Broadway, Boulder, CO 80304 • Phone: 303-441-1439 • Fax: 303-441-1468 • E-mail: [jlopitz@bouldercounty.org](mailto:jlopitz@bouldercounty.org)



# Executive Summary

## Keep It Clean Partnership

### 2011 Annual Report



To address the impact of stormwater on water quality, the federal Clean Water Act was expanded to include requirements that municipalities control pollutants from municipal separate storm sewage systems (MS4s). The Keep it Clean Partnership (KICP) grew out of the need for local communities to respond to these stormwater regulations that are implemented by the Colorado Department of Public Health and Environment (CDPHE). The Partnership is a collaboration of communities in the Boulder and St. Vrain watersheds, and includes Boulder County; the cities of Boulder, Lafayette, Longmont, and Louisville; and the towns of Superior and Erie (individually referred to as “Partners”), working together to protect water quality through stormwater management.

The KICP uses a unique, collaborative approach to involve various levels of government in creating cost-effective solutions to stormwater and other water quality problems. The KICP embodies the spirit of the watershed approach that was envisioned in the federal Clean Water Act and adopted in the Boulder Valley Comprehensive Plan.

## Into the Future

As the KICP Partnership enters its tenth year of implementation, the Partners continue to refine programs to meet the continuing challenges of stormwater management.



### MS4 Permit Compliance

In 2011, CDPHE indicated that conducting full permit compliance audits of individual MS4 programs was not sustainable, and the MS4s would be required to answer a permit assessment questionnaire in early 2012.

The KICP will spend a significant effort in 2012 developing the KICP Plan for the next five-permit term. The current permit expires in March 2013.

### Regulation 85

Nitrogen and phosphorous are currently one of the nation’s biggest water quality challenges. Referred to collectively as nutrients, they can encourage algae growth, which can rob the water body of oxygen and raise the pH. This can adversely impact aquatic life. In 1996, the Environmental Protection Agency (EPA) reported that nationally, 40% of rivers and 51% of lakes have designated use impairments from excess nutrients.

CDPHE spent 2011 working through the process of evaluating how to control the discharge of nitrogen and phosphorous from wastewater plants and stormwater runoff from urban municipalities. A cost benefit analysis was performed, though extensive analysis was not performed on the true cost of stormwater monitoring costs.

The regulation is currently going through the public review process. In March 2012, the Water Quality Commission will take preliminary final action on the proposed regulations, followed in April 2012 with final action, and in May 2012 Regulation 85 becomes effective.

As proposed, the KICP will be required to identify sources of nitrogen and phosphorus and provide public education and outreach to reduce those sources. In addition, MS4s would be required to evaluate their own operations to identify sources of nutrients that can be controlled through implementation of structural and nonstructural pollutant control practices. Regulation 85 also requires MS4s to analyze existing nitrogen and phosphorus data and identify data gaps.

### **Effluent Limitation Guidelines for Construction Sites**

In 2010, the U.S. Environmental Protection Agency (EPA) retracted the effluent limitation for turbidity as the science in which the limit was determined was challenged in court. Though EPA hoped to release a new limit for turbidity in 2011, that has not been accomplished. The existing EPA construction permit is due to expire in February 2012. The renewal process of the Colorado construction permit, which expires June 2012, has been delayed so that the EPA permit requirements can be finalized and then included in the Colorado permit.

### **Stormwater Rule**

In 2009, EPA began the process of asking for stakeholder input to strengthen stormwater regulations and to establish a comprehensive program to reduce stormwater from newly developed and redeveloped sites. In 2010, EPA sent out a survey to the state, local, and development communities to solicit details on stormwater management and control practices, local regulations, and baseline financial information. EPA has proposed taking final action by November 2012. A draft was to have been released by the end of 2011, but this milestone was not met.



### **Total Maximum Daily Load (TMDL) for E. coli**

In 2011, a TMDL was developed by the City of Boulder in accordance with Section 303(d) of the federal Clean Water Act. The TMDL established the estimated pollutant load reductions of E. coli necessary to meet water quality standards. The TMDL covers Boulder Creek Stream segment known as 2b from 13<sup>th</sup> Street to the confluence with South Boulder Creek. The TMDL will be added to the City of Boulder's MS4 stormwater discharge permit in 2013 and will require the development of an implementation plan to address controlling sources of E. coli.

In 2010, Boulder, Boulder County, Lafayette, Louisville, Erie, and Superior all received letters from CDPHE indicating that their communities' listed stream segments would soon be evaluated for an E. coli TMDL.

The state is asking all permitted communities to prepare for the TMDL by:

- ◆ Conducting dry weather surveys to identify illicit connections and discharges.
- ◆ Removing or controlling illicit connections/discharges.
- ◆ Providing public education and enforcement of pet waste ordinances and leash laws.
- ◆ Providing pet waste disposal cans in open space areas.
- ◆ Preserving natural riparian buffers.
- ◆ Working with local wildlife managers to assess the need for population controls or active management of urban wildlife.
- ◆ Considering use of such practices where contributing drainage area, depth to groundwater, and soil conditions are appropriate for infiltration-oriented best management practices (BMPs).

KICP will continue to monitor the E. coli TMDL development.

## 2011 Highlights

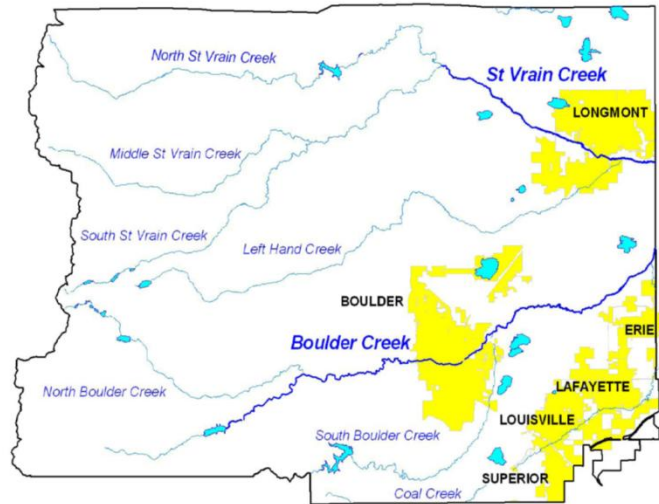
In 2011, the KICP Partners continued to implement and maintain the shared and common programs of their municipal stormwater discharge permits for a second five-year term (2008-2013). All measurable goals of the second permit cycle were met.

### New KICP Member

In January 2011, Lafayette requested to join the KICP Partnership. This request was unanimously approved, and a new intergovernmental agreement (IGA) to include Lafayette was fully executed on April 1, 2011.

### Costs

The staff currently includes 1.00 FTE to support the business and municipal outreach, 1.75 FTE to support the residential outreach program, and 0.75 FTE for the KICP coordinator position. In 2011, the KICP budget was \$457,534, of which \$81,967 (18%) was proportionately reimbursed to each of the Partners at the end of 2011.



### Shared KICP Program Evaluation by a Third Party

KICP requested that a third party evaluate the current shared programs and make suggestions for improvement. This activity is conducted the fourth year of every permit term so that programs can be modified for improved effectiveness before the Partners submit their program descriptions to CDPHE for the subsequent permit term.

The evaluation investigated how the current KICP approach compares and contrasts with other similar Phase II MS4 partnerships that share stormwater programs. Based upon the research findings and the review of almost 12 years of historical documentation for KICP, specific actions were recommended in order for KICP to deliver the most cost-effective, long-term stormwater program activities that truly improve water quality.

The evaluation posed several recommendations for KICP to consider:

- ◆ Update goals and objectives.
- ◆ Build on performance measures by estimating behaviors, and where possible characterize associated load estimates.
- ◆ Renew and reestablish the KICP Plan and include quantitative benchmarks driven by KICP goals and objectives.
- ◆ Individually and collectively track the full cost of MS4 compliance.
- ◆ Take steps to adjust staffing, contracting and organization to improve long term effectiveness.

### Website Revamp

The KICP website was redesigned to be more dynamic and interactive.





## School and Community Outreach Programs

KICP contracted with the City of Boulder's Watershed Education Program to implement the community outreach and school education programs.



**512** residents participated on 1 of **48** stream teams and collected **90** bags of trash  
**2,652** students and **127** classrooms/events participated in school-based education programs  
**1,831** students from **54** schools attended the Children's Water Festivals  
**746** storm drains were labeled with the message, "Dispose no Waste, Drains to Creek."  
**4,343** door hangers were distributed as part of the storm drain marking program  
**4,377** residents visited the stormwater booths at **23** community events  
**127, 040** brochures and campaign materials were distributed  
**520** residents attended 1 of **19** speaker events  
**144** families and individuals took the water protection pledge  
**14,000** visits to [www.KeepitCleanPartnership.org](http://www.KeepitCleanPartnership.org)  
**548,635** cars traveling past KICP tributary signs each day

## Stormwater Pollution Prevention Programs

The KICP contracted with the Partners for a Clean Environment (PACE) Program to implement the business and municipal outreach.



**57** restaurants were visited  
**45** vehicle service facilities were visited  
**69** retail establishments were visited  
**44** restaurant hood cleaners, **34** carpet cleaners, and  
**10** pressure washers received water quality protection information  
**18** gas stations were visited  
**18** property managers were visited  
**44** signs thanking customers for using a commercial carwash were posted  
**291** municipal employees were trained at **12** trainings  
**77** municipal facilities were visited

## Erosion Control, Permanent Water Quality Structures, and Illegal Discharge Prevention

KICP worked within their individual communities to implement operating procedures and regulations to manage illegal discharges, active construction, and post-construction management.



**24** participants were provided with construction erosion control training  
**291** municipal employees were trained about illegal discharge identification  
**227** illegal discharges received a response  
**132** active construction sites were inspected **3,122** times  
**28** post-construction controls were installed

# **Background, Partnership Overview, and 2011 Highlights**

## **Background**

To address the impact of stormwater on water quality, the federal Clean Water Act was expanded to include requirements that municipalities control pollutants from municipal storm drainage systems. In 1990, the U.S. Environmental Protection Agency (EPA) issued the Phase I Stormwater Rules. These rules require National Pollutant Discharge Elimination System (NPDES) permits for operators of municipal separate storm sewer systems (MS4s) serving populations over 100,000 and for runoff associated with industry, including construction sites 5 acres and larger. In 1999, EPA issued the Phase II Stormwater Rule to expand the requirements to small MS4s and construction sites between one and five acres in size.

The Keep it Clean Partnership, formerly known as The Watershed Approach to Stream Health (WASH) Project, grew out of the need for local communities to respond to these new stormwater regulations. In 1999, water quality and stormwater professionals representing various communities in the Boulder Creek and St. Vrain watersheds participated in meetings to help develop the goals, objectives, and project focus that are now incorporated into the Keep it Clean Plan. To further focus efforts, a 2006 Water Quality Roundtable was conducted where experts from local, federal, and state agencies identified six areas of concern typical of urban runoff. These include: pathogens (e.g. E. coli), sediment, nutrients, flow modification, metals, and pesticides. These impacts are considered when implementing programs.

The Keep it Clean Partnership (individually referred to as “Partners”) is a collaboration of communities in the Boulder and St. Vrain watersheds working together to protect water quality through stormwater management. The communities include Boulder County; the cities of Boulder, Lafayette, Longmont, and Louisville; and the towns of Superior and Erie.

The primary goal of the Keep it Clean Partnership (KICP) is to implement a regional stormwater management program, not only to comply with federal Phase II stormwater regulations, but also to address broader water quality issues. The KICP uses a unique, collaborative approach to involve various levels of government in creating cost-effective solutions to stormwater and other water quality problems. The KICP embodies the spirit of the watershed approach envisioned in the federal Clean Water Act and adopted in the Boulder Valley Comprehensive Plan.

## **Partnership Overview**

The KICP operates under a five-year plan that outlines programs tasks, schedules, and budget. Emphasis is placed on developing programs that meet federal Phase II Municipal Stormwater Discharge Regulations. The first plan, developed in 2002, used existing, successful programs; addressed community water quality goals; and allowed for flexibility within jurisdictional oversight. The second plan was finalized in October 2008 when the Partners applied for the 2008-2013 Phase II Municipal Stormwater Discharge Permit with the Colorado Department of Public Health and Environment (CDPHE).

Implementation of the Keep it Clean Plan is governed by an intergovernmental agreement (IGA) and supporting bylaws. The initial IGA was executed in January 2003, and a subsequent one was signed in December 2007. In 2011, Lafayette asked to join the KICP, and an IGA was redrafted to include Lafayette and was finalized on April 1, 2011. The IGA identifies a steering committee as the managing entity; it is made up of one voting representative from each Partner community. The steering committee directs the KICP coordinator, who provides administrative and management services to implement the Keep it Clean Plan and budget. The IGA identifies Boulder County Public Health (BCPH) as the contracting/fiscal agent. BCPH is also the employer of the KICP coordinator.

Municipal stormwater regulations call for implementation of six minimum control measures (MCMs) to address the impact of stormwater runoff on water quality and stream health. These programs implemented through the KICP Plan are as follows:

**1) MCM 1 - Public Education and Outreach**

- School-based education programs (classroom programs, water festival, and teacher training)
- Community outreach programs (outreach booth, speakers program, website, watershed stewardship, and stream volunteers supported with brochures and other outreach materials)
- Tributary signage and storm drain marking
- Business education program (see MCM 3)

**2) MCM 2 - Public Participation and Involvement**

- Website
- Annual outreach event booths to solicit input on Keep it Clean programs

**3) MCM 3 - Illicit Discharge Detection and Elimination**

- Legal prohibition of illicit discharges (ordinances)
- Illicit discharge enforcement (hotline, spill response plan, inspections, enforcement, and data tracking)
- Business Education Program
- Storm drainage system mapping

**4) MCM 4 - Construction Site Stormwater Runoff Control**

- Training and education for construction site operators and inspectors
- Erosion control ordinance (required erosion control for construction sites)
- Erosion control standard operating procedures (SOP) (outlines application and approval procedures for construction site stormwater management plan submittals)
- Erosion control inspection and enforcement (implementation of erosion control ordinance)
- Public input

**5) MCM 5 - Post-Construction Stormwater Management**

- Post-construction ordinance (required treatment of stormwater runoff)
- Design criteria and standards (outlines type of stormwater treatment or best management practices [BMP] required)
- Development review (ensures appropriate design of BMPs)
- BMP operation and maintenance (requires long-term maintenance of BMPs)

**6) MCM 6 - Pollution Prevention and Good Housekeeping for Municipal Operations**

- Training and certification for municipal facilities, activities, and employees



## **Implementation of the Keep it Clean Plan**

The Keep it Clean Plan uses a variety of approaches to reduce the discharge of pollutants from the storm drainage system to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act and the Colorado Discharge Permit Regulations.

- **Common Elements:** Program elements that have common themes and common implementation procedures. An example was the development of ordinance language.
- **Individual Programs:** Program elements that are exclusively the responsibility of individual Partners to implement. An example is the enforcement of erosion control and illicit discharge ordinances.
- **Shared Programs:** Program elements that are shared by all Partners. The following two contracts are examples:
  - The City of Boulder Water Quality Education Program provides community outreach materials and school programs in each of the Partner jurisdictions.
  - Boulder County's Partners for a Clean Environment (PACE) Program provides outreach materials and conducts site visits, addressing commercial and municipal operations.

## **2011 Highlights**

Through implementation of the Keep it Clean Plan, all Partners achieved compliance with their stormwater discharge permits. A summary of major tasks completed in 2011 follows.

### **Permit for 2008-2013**

The Phase II stormwater discharge permit for the Partners' first permit term expired at the end of 2007. The Partners submitted their program descriptions in June 2008 for coverage under the state's general discharge permit for the second permit term, which ranges from March 2008 to March 2013. In late August 2008, CDPHE asked for more program specifics to be submitted addressing individual Partner programs surrounding construction and post-construction plan review and enforcement. The final plan was submitted in October 2008; however, the state issued an additional request for details on individual Partner programs but did not require a written response.

It is anticipated that all future Partner program descriptions will be submitted individually.

In the summer of 2012, CDPHE is scheduled to release a draft of the 2013 – 2018 MS4 Phase II permit.

### **CDPHE Audits**

In June 2010, CDPHE conducted a full program audit of Erie's stormwater program. Erie submitted a revised program description document and adopted a revised ordinance, both of which addressed CDPHE comments.

In August 2010, CDPHE conducted a construction site screening inspection within the boundaries of Longmont. Longmont submitted a response to CDPHE's correspondence.

In 2011, none of the KIC Partners were audited. CDPHE decided that full audits were not sustainable, and after performing 10 full MS4 audits across Colorado, CDPHE drafted a permit assessment questionnaire, which will be mailed to all MS4s in early 2012.

### **Shared KICP Program Evaluation by a Third Party**

KICP requested that a third party evaluate the current shared programs and make suggestions for improvement. This activity is conducted the fourth year of every permit term so that programs can be modified for improved effectiveness before the Partners submit their program descriptions to CDPHE for the subsequent permit term.

The evaluation investigated how the current KICP approach compares and contrasts with other similar Phase II MS4 partnerships that share stormwater programs. Based upon the research findings and the review of almost 12 years of historical documentation for KICP, specific actions were recommended in order for KICP to deliver the most cost-effective, long-term stormwater program activities that truly improve water quality.

The evaluation posed several recommendations for KICP to consider:

- ◆ Update goals and objectives.
- ◆ Identify individual and shared responsibilities more clearly.
- ◆ Build on performance measures by estimating behaviors and, where possible, characterize associated load estimates.
- ◆ Renew and reestablish the KICP Plan and include quantitative benchmarks driven by KICP goals and objectives.
- ◆ Consider the possibility of a 5-year plan.
- ◆ Individually and collectively track the full cost of MS4 compliance.
- ◆ Take steps to adjust staffing, contracting, and organization to improve long-term effectiveness.
- ◆ Perform routine program evaluation.

### **Costs**

The Partner communities fund the common and shared program costs. Cost allocation is based on each Partner's urbanized population, as outlined in the Keep it Clean IGA. Costs to implement the individual community programs are the responsibility of each individual community. The KICP programs emphasize cost-effectiveness by sharing programs and using common strategies and leveraging existing programs. The common and shared programs are implemented by 3.50 full-time employees (FTE). The staff currently includes 1.00 FTE to support the business and municipal outreach, 1.75 FTE to support the residential outreach program, and 0.75 FTE KICP coordinator position.

In 2011, the KICP budget was \$457,534, of which \$81,967 (18%) was proportionately reimbursed to each of the Partners. The majority of the reimbursement represents the unspent contingency funds and residential outreach personal labor.

## **Grants**

The City of Boulder's Watershed Education Program received approximately \$5,000 in a 319 mini-grant to determine how to position the KICP mascots, H<sub>2</sub>O Jo and Flo within the 2012 Year of Water campaign.

The City of Boulder has submitted an application for a 319 grant proposing the development of a watershed plan, incorporating broad stakeholder input. As part of the effort, a strong baseline data inventory and long-term, coordinated monitoring plan for the overall St. Vrain Creek watershed would be completed. The grant asks for \$49,996 in funding and offers a \$33,375 match, for a total project cost of \$83,371.

## **School and Community Outreach Programs**

The Keep it Clean Partners contracted with the City of Boulder's Watershed Education Program to implement the community outreach and school education programs.

The program continued to reach out to schools and the residential community through school programs, stream teams, speakers programs, pledge programs, promotional material distribution, and storm drain markings.

In the summer of 2011, KICP teamed with the Boulder County Youth Corps to work in the creeks and surrounding community areas. The team worked hard to build trails near waterways to reduce erosion, remove muck out of a storm drain detention basin so water would flow, trash so it would no longer harm our environment, and hang door hangers so the word would be spread to "Keep it clean, 'cause we're all downstream."

## **Website Refresh**

KICP worked closely with a consultant on website redevelopment and migration to a stand-alone and staff-maintained website. The refreshed website went live in October 2011. The site now includes more imagery that better represents the work KICP performs.

The public is now able to request both speakers programs and school programs online.

## **Year of Water 2012**

The KICP Education Program has been participating in development of Year of Water 2012 activities and will provide guidance to the Partners on how KICP can celebrate via specific programs in 2012. Two traveling exhibits focusing on the Water 2012 message have been acquired and will accompany a speaker's program in each of the KICP communities.

## **Stormwater Pollution Prevention Programs for Private and Public Sectors**

The KICP contracted with the Partners for a Clean Environment (PACE) Program to implement the business and municipal outreach.

### Business Outreach

PACE offers a pollution prevention certification program to various business sectors. PACE services are free of charge to interested businesses. In 2010, PACE offered the Keep it Clean Partners six programs to address business activities with stormwater impacts:

- ◆ Restaurants and Vehicle Service
- ◆ Gas Stations
- ◆ Carwashes
- ◆ PACE Allies
- ◆ Property Management
- ◆ Beyond PACE

Business outreach continued to restaurant and vehicle service facilities. For over 16 years, PACE has delivered educational outreach on a range of topics, including energy efficiency, water conservation, and resource management to businesses in Boulder County. For the past ten years, PACE has included stormwater protection messages in its outreach to restaurants, auto repair facilities, and retail businesses in support of the KICP. While the majority of the businesses in these sectors have been contacted by PACE, repeated visits are typically necessary to counteract factors like employee turnover and simple apathy.

#### Municipal Outreach

PACE continues to outreach to the KICP municipal staff providing compliance advice and support. In 2011, 77 site visits were performed, and training to 291 municipal employees was provided across 5 different departments in 7 different municipalities. Highlights from 2011 include:

- ◆ Recognized 6 municipal “Stormwater Heroes” for their efforts to protect stormwater.
- ◆ Designed, printed, and distributed 20 “Fuel Spill Clean-up Procedures” signs to KICP Partners’ fueling sites.
- ◆ Conducted 12 “Beyond MCM 6 Site Visits” customized, in-field trainings, educating 28 employees and/or contractors.
- ◆ Refined the practices for the proper discharge of fire suppression system wastewater from new buildings and from annual testing, based on guidance from CDPHE.
- ◆ Provided research and assistance to parks and golf course departments with compliance with EPA’s permit for aquatic pesticide application.

#### **Erosion Control, Permanent Water Quality Structures, and Illegal Discharge Prevention**

The Keep it Clean Partners spent a significant amount of effort working within their individual communities implementing operating procedures and regulatory mechanisms needed to manage illegal discharges, active construction, and post-construction management.

#### Erosion Control Training

The KICP offered one Colorado Department of Transportation erosion control certification class, which was attended by 24 individuals.

#### Illegal Discharge and Detection

The Partners continue to respond to and track responses to illicit discharges in their communities. The data in 2011 was tracked individually.

## **KICP's Approach to 2012**

As the KICP Partners enter the tenth year of implementing the shared and common programs for the benefit of all of the Partners, they continue to fine-tune the outreach their shared programs offer and continue to identify programs that will ensure compliance with the stormwater discharge permit and protect local water quality.

In 2012, the KICP will focus on reviewing and revising the KICP Plan for the 2013-2018 permit term.

The KICP will play an active role in implementation of the statewide Water 2012 campaign while incorporating the KICP mascot, H<sub>2</sub>O Jo.

The Partners are implementing the KICP plan, which continues to be dominated by KICP contract personnel conducting outreach. The KICP continues to educate:

- ◆ School children
- ◆ Adults
- ◆ Businesses
- ◆ Construction operators
- ◆ Municipal employees

In addition to common and shared programs, each individual Partner will continue to be responsible for the following tasks in 2012:

- ◆ Implement their individual ordinances and related procedures, such as:
  - Review and track erosion control plans and proposed permanent water quality structures.
  - Conduct and track construction and post-construction site inspections.
  - Respond to, enforce, and track all illegal discharges.
- ◆ Maintain storm drainage outfall maps.
- ◆ Ensure municipal operations are in compliance with stormwater regulations.
- ◆ Participate in the ongoing implementation of the 2008-2013 KICP Plan.
- ◆ Track the development of the state E. coli total maximum daily load (TMDL) process, which may require communities to control bacterial pollutant sources.
- ◆ Track the development of Regulation 85 which focuses on nitrogen and phosphorous controls.

## **Future Watershed Considerations**

### Regulation 85 and 31

Colorado nutrient criteria development and reduction strategies have been in process for a significant period of time. CDPHE initiated studies as early as 1981 to ascertain appropriate nutrient standards for particular lakes and reservoirs in Colorado. By 1984, Colorado had adopted site-specific numeric total phosphorus and chlorophyll *a* standards for Cherry Creek, Chatfield, and Dillon Reservoirs. A narrative standard for Bear Creek Reservoir followed in 1992.

In early 2001, EPA published a notice in the Federal Register recommending that states and authorized tribes develop a nutrient criteria plan by the end of 2001 to outline a process for how

and when they intend to adopt nutrient criteria into their water quality standards. In addition, EPA recommended that states adopt nutrient criteria by 2004. EPA later softened these deadlines, and in late 2001 indicated states should begin discussing a plan with EPA, and that EPA would evaluate the progress of each state at the end of 2004 to determine how it compared with the schedule in the plan.

In late summer 2010, in response to a recommendation brought forth by stakeholders, CDPHE began to work on an entirely new and flexible nutrient reduction approach that does not rely on initial widespread promulgation of segment-specific standards, but rather combines development of interim numerical nutrient values with limited near-term adoption of site-specific numerical standards, a technology-based treatment requirement for wastewater dischargers, additional focus on nutrient control efforts for stormwater dischargers and nonpoint sources, and broad monitoring requirements.

In January 2011, the Water Quality Control Commission decided to delay the nutrient rulemaking an additional nine months, from June 2011 until March 2012, to accommodate a study of the costs and benefits associated with the Division's approach, financed by the Colorado Water Resources and Power Development Authority. The study was designed to evaluate both the costs of the proposed nutrient regulations, as well as the public health and environmental benefits.

MS4s would be required to identify sources of nitrogen and phosphorus and provide public education and outreach to reduce those sources. In addition, MS4s would be required to evaluate their own operations to identify sources of nutrients that can be controlled through implementation of structural and nonstructural pollutant control practices.

Existing data would need to be analyzed and gaps identified. In order to allow data from within watersheds around the state to begin to be collected concurrently, this regulation requires monitoring to be initiated by March 31, 2013, rather than through permit requirements. The KICP will be required to assess data that are representative of its discharges to help ensure that the characterization identifies information adequate to inform potential next steps for assessment to determine if stormwater-related nutrient loads to Colorado's surface waters need to be further reduced. The monitoring proposal strongly encourages and has explicit authorization for MS4 permittees to collaborate in the development and documentation of the MS4 data collection information.

In March 2012, the Water Quality Commission will take preliminary final action, followed in April 2012 with final action on the proposed regulations; and in May 2012, Regulation 85 becomes effective.

#### Stormwater Rule Survey

In 2008, a report was released from the National Research Council on *Urban Stormwater Management in the United States*. The report addressed not only the challenges in managing stormwater in an urbanized environment, but it also recommended future management of all water-related permits on a watershed basis. The content of the report will continue to guide the



future work of the KICP. The report cited the support for a National Stormwater Rule survey, which was to be finalized by EPA the end of 2011 but has yet to be issued.

In 2009, EPA began the process of asking for stakeholder input to strengthen stormwater regulations and to establish a comprehensive program to reduce stormwater from newly developed and redeveloped sites. In 2010, EPA sent out a survey to the state, local, and development communities to solicit input on the following areas, including detailed information about stormwater management and control practices, local regulations, and baseline financial information:

- ◆ Expansion of the area subject to federal stormwater regulations.
- ◆ Establishment of specific requirements to control stormwater discharges from new development and redevelopment.
- ◆ Development of a single set of consistent stormwater requirements for all MS4s.
- ◆ Requirement of MS4s to address stormwater discharges in areas of existing development through retrofitting the sewer system or drainage area with improved stormwater control measures.
- ◆ Exploring of specific stormwater provisions to protect sensitive areas.

EPA had proposed releasing the draft rule in September 2011 and taking action in 2012, based on the results; however, as of January 2012, the draft rule had not yet been released.

#### Effluent Limitation Guidelines for Construction Sites

All construction sites over an acre are currently required to obtain permit coverage and must implement a range of erosion and sediment controls and pollution prevention measures.

The 2012 federal construction general permit (CGP) is required under the Clean Water Act and replaces the existing 2008 CGP, which expired on February 15, 2012. The new permit includes a number of enhanced protections for surface waters, including provisions to protect impaired and sensitive waters.

In early 2012, the final CGP permit was released and includes steps intended to limit erosion, minimize pollution sources, provide natural buffers or their equivalent around surface waters, and further restrict discharges to areas impaired by previous pollution discharge.

The turbidity limit is yet to be determined and currently is not included in the permit.

It is unclear how the federal CGP will affect the state CDPHE general construction permit due out in draft in the summer of 2012.

#### Total Maximum Daily Load

On a semi-annual basis, the CDPHE Water Quality Control Division (WQCD) develops a list of impaired waters in the state, as mandated under Section 303(d) of the federal Clean Water Act. Pollutants entering the impaired water are generally controlled through numeric limits on permitted discharges, which could include wastewater treatment and/or stormwater discharges.

Three creek segments in the KICP communities have been listed as impaired for *Escherichia coli*, or *E. coli*. The following table outlines the stream segments, as well as the communities discharging to these segments:

<b>303(d) Listed: Impaired Stream Segment</b>	<b>KICP Community</b>
Boulder Creek from 13 <sup>th</sup> Street to the confluence with South Boulder Creek	Boulder
Coal Creek from Highway 36 to Boulder Creek	Louisville
Boulder Creek from Coal Creek to St. Vrain Creek	Erie, Superior, Lafayette
Rock Creek in Segment 8	Superior

The municipal stormwater discharge permits include language that provides for the implementation of total maximum daily load requirements. Affected communities, therefore, may have to meet numeric discharge standards through a TMDL process associated with their discharge permit(s).

The implication of an *E. coli* TMDL for any of these communities is uncertain at this time; however, if numeric standard of 126 cfu/100ml is established, it may be difficult, if not cost-prohibitive, to meet such a standard. KICP may be able to assist in the regional effort of TMDL tasks. In 2010, the City of Boulder began working with CDPHE to develop the TMDL for Boulder Creek. In 2011, the City of Boulder finalized the *E. coli* TMDL and began work to define and implementation plan.

#### Temperature Standard

In 2006, the WQCD proposed changes to statewide water temperature standards. A more restrictive and complex set of temperature standards were adopted in the Colorado Basic Standards and Methodologies for Surface Water. The WQCD will evaluate receiving water temperature data and determine whether discharges, such as treated effluent from wastewater treatment facilities, should have a lower effluent temperature to protect aquatic life (recognizing that temperature variations result from natural conditions and irreversible human impacts).

#### Aquatic Life Standards

The WQCD initiated the Aquatic Life Work Group in 2000 as part of their process of developing aquatic life water quality standards, which are expressed as biocriteria. The primary function of biocriteria is to describe the biological condition that is necessary to support the designated use of the water body, including lakes, reservoirs, rivers, and streams. Bioassessment tools are being developed to quantify the biological condition of an aquatic community. The primary intent of biocriteria is not to set a regulatory standard, but rather to be used to detect impairment in aquatic life and identify probable causes of the impairment. To date, the approach to developing biocriteria has focused on using macro invertebrate population data, habitat assessments (physical features), and fish population data. One of the main challenges in developing biocriteria is determining “expected conditions.” The expected condition will reflect a range of biological characteristics that are considered “normal” or “healthy” for a water body. Impairment of a water body will be based on the comparison of the expected condition to the actual condition, based on collected data. The Basic Standards Rulemaking Hearing was held in 2010.

### Airborne Contaminants

The U.S. Geological Survey's National Water Quality Assessment Program included the first comprehensive evaluation of waterways in the U.S. The study identified airborne contaminants as a source of hydrocarbon pollutants in surface water, stormwater, and groundwater. The burning of fossil fuels likely formed these contaminants. EPA has indicated that these contaminants will be regulated in the future.

### Sediment

CDPHE has adopted guidance concerning sediment deposition impacts to aquatic life in streams and rivers. The guidance document, "Provisional Implementation Guidance for Determining Sediment Deposition Impacts to Aquatic Life in Streams and Rivers," focuses on the application of "expected conditions" with respect to aquatic life classification, nutrient criteria, and narrative sediment standard issues. The WQCC is currently developing sediment regulations, which were expected to be completed by 2011 but had not been released by the end of 2011.

### Presence of Invasive Species in Colorado

In 2008, Quagga and Zebra Mussels were detected in Colorado reservoirs, including Carter Lake, upstream of Boulder Reservoir. The State of Colorado initiated an extensive monitoring and education program related to the invasive species.

### Climate Change

One of the biggest factors impacting water quality is the modification of stream flows and groundwater levels. These modifications are due in a large part to increased runoff from urban areas and to diversions and return flows from agricultural and municipal water demands. This hydrologic modification of the natural stream system leaves little water in the creek to provide dilution of pollutants, or to maintain habitat and the natural stream channel. These hydrologic conditions may be further affected by climate change.

In a recent study completed by the University of Colorado for the City of Boulder's Water Resources Workgroup, researchers predict dryer winters and wetter springs with an earlier mountain snow runoff period. These conditions could lead to depleted stream flows in the winter, threatening aquatic life and resulting in more frequent and severe flooding in the spring, which could lead to accelerated stream bank erosion and degradation of aquatic and riparian habitat. Both conditions could lead to degraded water quality.

## **2011 Activities**

# **MINIMUM CONTROL MEASURES**

The following is a summary  
of  
activities implemented under  
the  
Keep it Clean Plan  
for  
each of the  
Six Minimum Control Measures (MCMs)

# MCM 1 - Public Education and Outreach

## Permit Requirement

The 2008-2013 permit requires:

*The permittee must implement a public education program in an effort to promote behavior change by the public to reduce water quality impacts associated with pollutants in stormwater runoff and illicit discharges that includes:*

- 1) Targeting specific pollutants and pollutant sources determined by the permittee to be impacting, or to have the potential to impact, the beneficial uses of receiving waters;*
- 2) Conducting outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff; and*
- 3) Informing businesses and the general public of the municipality's prohibitions against and/or the water quality impacts associated with illegal discharges and improper disposal of waste.*

## Program Objective

*Getting the Word Out - Public Education:* Individuals play a key role in reducing stormwater impacts in their day-to-day activities. To successfully achieve water quality goals, a public education program must first educate the public on the extent and nature of the problems associated with urban runoff. Next, the public must be instructed on what they can do to help solve the problem. And finally, a successful program must provide opportunities for hands-on activities.

## Program Implementation

The Keep it Clean Partnership (KICP) contracts with the City of Boulder to provide the Keep it Clean Education Program, which include activities required under MCM 1 and MCM 2 for all KICP communities. The Keep it Clean Education Program staff, with direction from the Keep it Clean Steering Committee and input from Partner for a Clean Environment (PACE) staff, implemented programs outlined in the Keep it Clean Plan. Individual Partners are responsible for certain program elements, including the continued distribution of brochures and directing their citizens to the KICP website. The KICP Education Program conducts school-based education and community-based outreach programs to educate teachers, students, and families (adults) on ways to change their behavior to reduce water pollutants.

## School-Based Education Programs

### Operation Water Festival

Annually, two day-long events with hands-on water quality activities will be conducted. The festival is provided for Boulder Valley School District (BVSD) and St. Vrain Valley School District (SVVSD) students.

H<sub>2</sub>O Jo and Flo reappeared in 2011 as hosts for the BVSD and SVVSD water festivals with their message, "Keep it clean, 'cause we're all downstream!"

A total of 1,004 BVSD 4<sup>th</sup> and 5<sup>th</sup> grade students and their teachers from 42 classrooms in 16 BVSD schools attended the 19<sup>th</sup> annual Children's Water Festival held at the University of Colorado (CU) campus on May 11, 2011. Sponsors included the Northern Colorado Conservancy District, CU's Office of Community Relations, and the U.S. Bureau of Reclamation.

A total of 827 SVVSD 5<sup>th</sup> grade students and their teachers from 34 classrooms in 12 SVVSD schools attended the Longmont Children's Water Festival, held at the Raddison Events Center in Longmont on May 10, 2011. Additional sponsors included the City of Longmont, the U.S. Bureau of Reclamation, and the Northern Colorado Water Conservancy District.

This year marked the sixth year of the pre-festival Operation Water Festival Program. The materials focus on fundamental water awareness, conservation, pollution, and flooding designed for 4<sup>th</sup> and 5<sup>th</sup> graders. The program, Operation Water Festival, includes a complete teacher's packet featuring teacher's guides, student worksheets, and flashcards on each water topic.

A key benefit of the Operation Water Festival materials is the take-home water agent book. Students are encouraged to work with family members to complete the assignments. As a result, parents and siblings also learn about water protection and conservation.

All BVSD and SVVSD classes attending the Children's Water Festival participated in the Water Ambassador Program.

#### **School-Based Education Programs**

Annually, a minimum of 60 classroom and/or field-based programs will be offered to BVSD and SVVSD teachers and students.

The *Get to Know Your H<sub>2</sub>O* postcard, featuring a school-based graphic of H<sub>2</sub>O Jo, brief description, and link to the website with classroom programs, was distributed to all K-5 teachers and 6-12 science teachers in BVSD and SVVSD, as well as to local private schools. The postcard was also sent to teachers via an email attachment. Keep it Clean Partnership Education staff facilitated 127 stormwater education programs and reached a total of 2,652 BVSD and SVVSD students in 2011.

#### **Classroom Programs**

<b>Partner</b>	<b>Number of Classrooms</b>	<b>Number of Students</b>
Boulder	37	696
Longmont	32	706
Lafayette	10	214
Boulder County	14	376
Louisville	14	226
Erie	16	304
Superior	4	130
<b>Total</b>	<b>127</b>	<b>2,652</b>

#### **Teacher Led Programs**

In addition to providing classroom and field-based programs, KICP staff provided training and loan equipment/resources to teachers wishing to teach programs in their own classrooms. In 2011, 4 teachers provided programs for 132 students in 4 BVSD and SVVSD classrooms.

#### **Community Partnership**

This year marked the second year the KICP partnered with Thorne Ecological's Sombrero Marsh program. The district supported marsh program engages BVSD 4<sup>th</sup> grade students in a full day educational program at the Sombrero Marsh. The KICP Enviroscape stormwater model program



entitled *Rain, Rain Go Away* is a station on this field trip. KICP has trained Thorne staff and interns to deliver this program, and as a result, 1,780 4<sup>th</sup> grade students from 25 BVSD schools participated in 156 stormwater *Rain, Rain Go Away* programs in 2011.

### **Science is Everywhere**

The year 2011 marked another successful year partnering with local environmental organizations to host the *Science is Everywhere* Program. The program included hosting a water education table at Loma Linda Elementary School in Longmont, where 50 students participated in a stormwater pollution prevention program. The following week, many of these same students, along with their families (siblings and grandparents included), attended the *Science is Everywhere* night at the National Center for Atmospheric Research (NCAR) in Boulder. A total of 150 people attended the event, where students taught families lessons learned at the water quality station and other stations they had visited the prior week.

### **Latin American Center for Arts, Science and Education (CLACE): Water Green Lab**

BVSD's Columbine Elementary students spent the fall of 2011 learning about global climate change and fostering a sense of environmental stewardship in an afterschool program funded by NASA and provided by CLACE. Students were able to choose a topic of interest to them—from air to energy, from soil to water. These topics were then co-taught with a CLACE facilitator and a community sponsor to ensure that students were able to gain in-depth information about their topic of interest.

KICP Education staff worked with students who chose to be in the Water Green Lab. Throughout the semester, students learned about the water cycle, how water moves through the Boulder Creek Watershed, and how both climate and humans affect local waterways. Students were able to see the connection between the waste humans produce and how improper disposal of trash can litter our waterways. Additionally, students learned how stormwater washes down streets and parking lots, driveways and sidewalks, roofs and yards, carrying water and everything it picks up into storm drains. These storm drains lead directly to nearby lakes, creeks, streams, rivers, and wetlands. This combined pollution can affect our local fish habitat, swimming areas, and drinking water.

During the first semester this program reached a targeted audience of 100+ K-5 Green Lab students at Columbine, as well as a much larger population of students, teachers, staff, and families. The program has helped to raise the local and regional Latino population's awareness of environmental issues. The KICP will continue to work with the CLACE program in 2012.

### **Teacher Workshop**

Annually, one training will be offered to BVSD and SVVSD K-12 teachers on the use of KICP-sponsored and other water quality curriculum.

The web-based *Watershed Resource Guide* (grades 4-12) and *H<sub>2</sub>O Go! My Water Units* (grades 6-8) contains background information and activities related to the Boulder Creek and St. Vrain Creek watersheds. These materials and the *Project WET* (Water Education for Teachers) materials are used as the basis for the annual *Get to Know Your H<sub>2</sub>O Teacher Training*. All BVSD and SVVSD K-5 grade teachers and 6<sup>th</sup>-12<sup>th</sup> grade science teachers received an email advertising the free two-day training.

A total of 11 educators participated in this workshop in August 2011. Together, those educators will reach over 914 students in the 2010-2011 school year.

In addition, KICP hosted a *Project WET* workshop for Wild Bear Center for Nature Discovery staff. Located in Nederland, Colorado. Wild Bear provides environmental science programming to Boulder County youth and families. KICP staff trained 12 Wild Bear educators in 2011. Collectively, these educators will reach an estimated 1025 students through Wild Bear's after school and summer camp programs.

### Community-Based Outreach Programs

#### Outreach Booth

Provides stormwater pollution prevention materials to the public. Annually, a staffed booth travels to at least one special event in each of the partner communities.

Utilizing graphics and messages created for the "Keep it Clean" water quality campaign, a special events outreach booth was developed. The booth includes hands-on, portable, engaging activities that serve as tools for community members to learn about stormwater pollution and recognize how their behaviors can affect water quality. KICP staff provides citizens with an opportunity to discuss, provide input on, and learn about stormwater issues.

The booth reached 4,377 individuals at 22 outreach booth events in 2011.

### Festivals or Special Events

Partner	Date of Event	Event	Visitors
Boulder	March 3, 2011	Boulder Flycasters Youth Event	75
	March 8, 2011	CU Internship Fair	50
	April 29, 2011	Colorado Children's Day	222
	April 30, 2011	Teaching Outside the Box	297
	May 1, 2011	Green Frontier Festival	80
	May 14, 2011	Community Cleanup Day	75
	August 11, 2011	CU Resource Fair	220
	September 18, 2011	Green Streets	538
	September 24, 2011	Pharmaceutical Collection Event	415
	November 30, 2011	CLACE Science Night	30
Longmont	March 19, 2011	Science is Everywhere Family Night	150
	April 16, 2011	Arbor Day	198
	July 9, 2011	Rhythm On the River	550
Lafayette	May 4, 2011	Waneka Lake Day & Fishing Derby	160
Boulder County	April 16, 2011	Wild Bear Science Saturday	235
	April 21, 2011	IBM Earth Day Fair	202
	November 13, 2011	Making Waves Colorado	105
Louisville	June 4, 2011	Taste of Louisville	253
Erie	April 23, 2011	Arbor Day Celebration	94
	June 18, 2011	Erie Bark in the Park	60
	September 10, 2011	Great Erie Outdoor Adventure	177
Superior	April 9, 2011	Arbor Day Clean Up	6
	September 11, 2011	Chili Cook-off	185
<b>Total</b>	<b>23 events</b>		<b>4,377</b>

The H<sub>2</sub>O Jo mascot attended 10 school and community events in the Keep it Clean communities.

**Speakers Program**

Staff and expert speakers attend events in each of the KICP communities to present water quality information to various community groups.

The Speakers Program includes a list of speakers available to present water quality information at local events. A program overview, the presentation options, and a list of speakers are available at [www.KeepitCleanPartnership.org](http://www.KeepitCleanPartnership.org). KICP staff provided 19 presentations and reached 520 people. In 2011, a total of three homeowners associations (HOA) committed to inserting stormwater information in a residential newsletter. In addition, several Stream Team members were recruited through the Speakers Programs.

**Speaking Events**

<b>Partner</b>	<b>Date of Event</b>	<b>Group</b>	<b>Audience</b>
Boulder	February 3, 2011	Water Foundations Class	20
	March 10, 2011	BVSD Water Agent	100
	April 7, 2011	Water Foundations Class	3
	June 21, 2011	Dr. Lander's Water Class	19
	June 29, 2011	Teacher Workshop	18
	July 11, 2011	CSU and Nation Water Profs	8
	October 13, 2011	Water Foundations Class	6
Longmont	March 17, 2011	SVVSD Water Agent	75
	May 9, 2011	Renaissance HOA	30
Lafayette	April 18, 2011	Homestead Manor	5
Boulder County	March 8, 2011	Life Long Learning Class	22
	April 5, 2011	Open Space Trails Guides	27
	June 4, 2011	National Trails Day Volunteers	25
	June 7, 2011	Open Space Trail Guides	15
	November 13, 2011	Making Waves Speaker's Panel	25
Louisville	June 15, 2011	Meadows at Coal Creek HOA	39
Erie	April 19, 2011	Erie Commons HOA	3
	December 8, 2011	Erie Senior Center	40
Superior	January 28, 2011	Horizon's Clubhouse	40
<b>Total</b>	<b>19 events</b>		<b>520</b>

**Watershed Stewardship Program**

Trains volunteers to be neighborhood water quality advocates. Staff will offer programs in each KICP community.

The Watershed Stewardship Program is a neighborhood-based behavior change and outreach program. The goal is to engage residents in water protection activities so they reduce stormwater pollution in their community.

The program was offered via the website and printed recruitment materials. In 2011, the Boulder County Youth Corps team received the program.

**Stream Teams**

Provides community volunteers the opportunity to be involved in water protection activities by providing resources and training for creek cleanups, water quality monitoring, and more. Staff will support teams in each KICP community.

The Stream Team Program was promoted to the general public via press releases and direct mail/email to target groups. In 2011, 48 groups are enrolled as active stream teams. Keep it Clean Partnership staff provided training on how to perform safe creek cleanup activities and, where appropriate, how to use sampling equipment, which is loaned free of charge to all interested parties.

**Stream Teams**

<b>Partner</b>	<b>Number of Groups</b>	<b>Number of Participants</b>	<b>Bags of Trash Collected</b>
Boulder	21	221	38
Longmont	11	83	19
Lafayette	3	32	2
Boulder County	5	78	20
Louisville	5	62	9
Erie	1	6	0
Superior	2	30	2
<b>Total</b>	<b>48</b>	<b>512</b>	<b>90</b>

**Informational and Promotional Materials**

Brochures, fact sheets, and product give-aways are produced, as needed, for distribution at school and community events. At a minimum, distribution will take place annually at special events in each partner community. Distribution also takes place through the school-based education programs and within public municipal areas.

Distribution of the Keep it Clean general residential brochure continued. A total of 6,811 Spanish and English language brochures were distributed throughout KICP communities at school, community, business outreach, and residential direct mail programs. In addition to the KICP efforts, the City of Boulder produced a 1/3-page version of the Keep it Clean brochure for inclusion in utility bill inserts. This brochure featured information in both Spanish and English and was mailed to 27,000 Boulder residents. Boulder also distributed 27,000 Drinking Water Reports, which featured an image of H<sub>2</sub>O Jo and Flo and listed the Keep it Clean Partnership website. The City of Longmont included a quarter page of stormwater quality information in their annual Drinking Water Report, which was mailed to 36,000 addresses. Longmont also featured the Keep it Clean message in the *CityLine* publication, which reaches 42,000 community members. In total, the KICP distributed 138,811 brochures and flyers.

Campaign promotional materials are distributed to bring the campaign message into Keep it Clean Partnership community homes, businesses, and schools. KICP distributed 61 magnets; 4,413 temporary tattoos; 6,239 stickers; 3,486 *Adventures of H<sub>2</sub>O Jo and Flo* activity books; and 675 placemats.

### Informational and Promotional Material Distribution

Partner	Number of households	Number of brochures and campaign materials distributed in 2011
Boulder	39,596	39,950
Longmont	26,667	81,338
Lafayette	10,392	734
Boulder County	8,900	1,918
Louisville	7,216	797
Erie	3,750	1,498
Superior	4,500	805
<b>Total</b>	<b>101,021</b>	<b>127,040</b>

### Pledge Program

The year 2011 marked the second year for implementation of a full scale pledge program. Both the community-based and school-based Keep it Clean pledge programs are tools to increase the number of Keep it Clean Partnership community residents who take action to reduce the amount of stormwater pollution that washes off of their homes and business properties.

The community pledge, offered at each outreach booth event, invited community members to pledge to mark a local storm drain and hang door hangers in the same area. In 2011, a total of 69 people pledged to mark 121 storm drains and hang 221 door hangers. Through email and phone communication, staff confirmed that pledge program participants marked 28 storm drains and distributed 40 door hangers.

The school-based pledge program, offered through the school education program and including water festival participants, invited students and their families to select and pledge to specific water protection actions at home. Participating families selected from a list of 7 actions. In 2011, a total of 75 families pledged to take a total of 465 water protection actions.

KICP staff solicited feedback on the pledge program from teachers and families as well as discussed areas of improvement for internal purposes. As a result, the pledge documents were edited for use in 2012. In addition, the family pledge is posted on the KICP website.

### Year of Water 2012

KICP applied for and received a nearly \$5,000 grant from the Colorado Department of Public Health and Environment's Non-Point Source Program. The grant project, "Keep it Clean, Colorado Year of Water 2012", included development of a hybrid logo and documentation of recommendations for implementation in communities statewide. A pre- and post-program survey was also developed to be distributed twice in 2012. To date, feedback on the logo has been positive, and many communities have already implemented use of the logo or have committed to using the new logo in 2012. KICP created a 2012 Water Festival T-shirt design with the logo and will feature the logo on education and adult outreach program marking materials. In addition, the KICP purchased the Colorado Water 2012 traveling exhibit. This exhibit will be scheduled to appear at key locations in KICP communities throughout the year 2012.

## **Tributary Signage and Storm Drain Marking**

### **Storm Drain Marking**

In the first permit term, 25% of all KICP storm drains were marked. KICP Education staff will maintain equipment and support volunteer groups to mark an additional 3% of the storm drains in each KICP community. Where appropriate, program participants may also post door hangers that explain the stormwater pollution prevention message.

Keep it Clean Education staff facilitated storm drain stenciling activities with over 138 youth and citizens in Keep it Clean communities. Keep it Clean Education staff used curb markers to identify 746 storm drains, exceeding the goal of 3% marked drains.

Storm Drain Marking Program volunteers and KICP staff distributed 4,343 door hangers as part of the marking program in neighborhoods.

This year marked the development of a Lafayette door hanger. This custom door hanger mirrors the KICP door hanger but does not include reference to the KICP storm drain marker. Lafayette has a stenciling storm drain marking program. A key feature of the newly designed door hanger is the Spanish translation on one side.

The brightly colored door hangers were distributed to property owners in the same block that the storm drains were marked. The door hangers included information about the Storm Drain Marking Program and tips on ways to protect and conserve local waters. The door hanger also lists the [www.KeepitCleanPartnership.org](http://www.KeepitCleanPartnership.org) website and the Keep it Clean spill hotline (303-441-4444).

### **Door Hanger Distribution**

<b>Partner</b>	<b>Number of Door Hangers distributed in 2011</b>
Boulder	1,485
Longmont	745
Lafayette	248
Boulder County	693
Louisville	214
Erie	433
Superior	525
<b>Total</b>	<b>4,343</b>

Volunteers were recruited via a flyer to local community groups, the cities of Boulder and Longmont community service programs, and through school and scout groups.



### Storm Drain Marking

Partner	Total Number of Storm Drains	2003	2004	2005	2006	2007	2008	2009	2010	2011	Percent of Total Marked in 2011
Boulder	4,180	209	439	402	264	402	228	440	288	200	4.8%
Longmont	1,820	99	95	115	170	193	83	115	179	281	15.4%
Boulder County	225	82	40	31	23	50	36	15	58	44	19.6%
Louisville	600	43	137	31	31	83	26	58	43	40	6.7%
Erie	685	62	17	162	144	70	42	253	22	92	13.4%
Superior	300	22	20	74	20	30	36	32	38	89	29.7%
<b>Total</b>	<b>7,810</b>	<b>517</b>	<b>748</b>	<b>815</b>	<b>652</b>	<b>828</b>	<b>451</b>	<b>913</b>	<b>628</b>	<b>746</b>	<b>9.6%</b>

### Tributary Signage

A minimum of five tributary signs are posted within each of the KICP Partner communities in prominent locations.

In 2003, tributary signs were designed and installed along major intersection marking significant waterways, with the intent of increasing public awareness of local water resources. The sign caption reads, “Keep it clean, ‘cause we’re all downstream!” and includes the local creek name.

### Tributary Signs

Partner	Number of Tributary Signs 2011
Boulder	43
Longmont	9
Boulder County	6
Louisville	8
Erie	5
Superior	6
<b>Total</b>	<b>77</b>

In total, over 548,635 cars travel past these signs each day.

### Daily Vehicle Miles passing Tributary Signs

Partner	Number of daily vehicles traveled (DVT) for streets with tributary signs installed
Boulder	207,531
Longmont	239,435
Boulder County	27,338
Louisville	29,682
Erie	6,899
Superior	37,750
<b>Total</b>	<b>548,635</b>

## **Reaching Diverse Audiences**

Businesses, teachers, students, and residents of diverse backgrounds are reached through the programs mentioned above. In addition, the KICP program has published and distributed two brochures that were translated into Spanish.

The Spanish general KICP brochures continue to be distributed.

## **Boulder County Youth Corps Team**

In 2011, the Keep it Clean Partnership sponsored a Youth Corps Team. The Keep it Clean Partnership solicited the help of five Boulder County Youth Corps teens and their team leader in the summer to help improve the condition of our waterways. The team built trails near waterways, removed muck from a detention basin, bagged trash, and hung door hangers.

In just eight short weeks, the team completed the following accomplishments:

- ◆ Cleaned and assessed 4.2 miles of streams
- ◆ Marked 235 storm drains
- ◆ Distributed 1,900 door hangers
- ◆ Removed 225 lbs. of trash and 103 lbs. of recycling
- ◆ Mulched 150 trees
- ◆ Removed sludge and weeds from detention ponds
- ◆ Identified 4 locations of standing water
- ◆ Identified 2 potential illicit discharges
- ◆ Talked to 12 people

The Youth Corps provides opportunities for Boulder County teens to develop a sense of community involvement through personal accomplishment, teamwork, and service to the county. Corps members benefit by learning strong work habits, new skills, and the value of environmental and civic stewardship. Keep it Clean Partnership plans to work with a Public Health Youth Corps team again in 2012.

## **Illicit Discharge Education to Business and the Public**

The Partners for a Clean Environment (PACE) program reaches restaurants, vehicle service facilities, and other businesses that have the potential to adversely impact water quality. Outreach is performed either by direct personal contact, educational materials, or web resources.

The KICP Education Program informs residents of the impact of improper disposal of wastes. This is done through direct personal contact, educational materials, or web resources.

The PACE Program conducts visits and observations with commercial business. The point of contact is to educate on proper practices so water quality is not adversely affected. For details on the business outreach effort, see the Minimum Control Measure (MCM) 3 section.

The KICP Education Program continued personal contact to educate the public on the impact of daily activities on water quality. This is conveyed during event booth and school interactions.

## **2012 Focus**

During the development of the 2008-2013 KICP programs, a stronger emphasis on adult outreach was outlined. The KICP Stormwater Education Program has realized that the development of a

communications plan is instrumental in effectively recruiting for the predominately adult-focused Stream Team, Speaker, and Watershed Stewardship Programs.

#### **Coordinated KICP/PACE Pet Waste Campaign**

PACE and KICP Education staff will again work together on a coordinated pet waste campaign in 2012. This will include development of pet waste pickup signage that may be placed in KICP communities.

#### **Boulder County Youth Corps**

KICP Education staff will work with the Boulder County Youth Corps. The KICP education coordinator will refine the 2011 organizational plan and will work closely with KICP Partners to ensure a successful and efficient 2012 Youth Corps season.

#### **Website SOP**

KICP Education Program coordinator along with the KICP coordinator will develop a website SOP so that a plan is in place for website updates, blog, and inclusion of additional social media tools (including an interactive pledge program).

#### **Year of Water 2012**

The KICP Education coordinator will coordinate the traveling exhibit and speakers program to support the Year of Water 2012 activities in each KICP community. In addition, the KICP Outreach coordinator will provide guidance to the KICP Partners for additional ways their community can participate in this statewide celebration.

#### **Program Changes**

None

#### **Budget**

Proposed: \$167,474

Actual: \$139,361

Unexpended funds: \$28,113

## MCM 2 - Public Involvement and Participation

### Permit Requirement

The 2008-2013 permit requires:

*The permittee must implement a public involvement program as follows:*

- 1) The permittee must comply with the State and local public notice requirements when implementing the CDPS Stormwater Management Programs required under this permit. Notice of all public hearings should be published in a community publication or newspaper of general circulation, to provide opportunities for public involvement that reach a majority of citizens through the notification process.*
- 2) The permittee must provide a mechanism and process to allow the public to review and provide input on the CDPS Stormwater Management Program.*

### Program Objective

*Promoting Public Participation:* To ensure buy-in and support from the public, participation is critical. This includes providing information and seeking public input on stormwater management issues.

### Program Implementation

The KICP Partners contract with the City of Boulder to provide the Keep it Clean Education Programs, which includes activities required under MCM 1 and MCM 2 for all Keep it Clean Partner communities. Individual Partners are responsible for certain program elements, such as directing their citizens to the KICP website. The Keep it Clean programs include participatory programs, such as storm drain stenciling and stream teams. The KICP Steering Committee agendas and minutes are posted monthly online. The entire KICP Education Program's annual report is available at [www.KeepitCleanPartnership.org](http://www.KeepitCleanPartnership.org). The following is a summary of that report, as it relates to public participation.

#### Public Notices

The KICP Steering Committee agendas and minutes are posted monthly online. All individual KICP Partner meetings are publicly noticed, as required by local ordinance.

#### Providing a Mechanism for Public Involvement/Feedback

Either the general KICP or the KICP Education Program's phone number is listed on publications. The KICP website lists all the contact information for all Partners. Each Partner's website provides a link to the KICP website. The KICP Stormwater Management Program descriptions document is posted on the KICP website. An outreach booth (see MCM 1) is sponsored annually in each Partner community, where program feedback and suggestions are welcomed from the public.

The public continued to navigate through the Keep it Clean Partnership background information (including the six MCMs, annual reports, and stormwater resources) and Education and Outreach Program information. The [www.KeepitCleanPartnership.org](http://www.KeepitCleanPartnership.org) website is updated frequently to include the most current project information. In addition, teachers and staff continue to use this site for program registration.

In 2011, the website was revamped to include more photographic images, and the content was organized with the key stakeholders in mind. The site revamp also includes the addition of automated program registration.

Website Viewings		
Year	Average Monthly Requests	Average Monthly Distinct Hosts Served
2004	1,587	703
2005	3,363	859
2006	3,029	1,543
2007	2,653	1,380
2008	3,373	1,340
2009	3,332	1,150
2010	3,898	971
2011	5,577	1,145

All Keep it Clean Partners list the KICP website on their own communities' websites, which include:

- ◆ **Boulder County:** [www.bouldercounty.org](http://www.bouldercounty.org)
- ◆ **Boulder:** [www.boulderwater.net](http://www.boulderwater.net)
- ◆ **Longmont:** [www.ci.longmont.co.us](http://www.ci.longmont.co.us)
- ◆ **Louisville:** [www.ci.louisville.co.us](http://www.ci.louisville.co.us)
- ◆ **Superior:** [www.townofsuperior.com](http://www.townofsuperior.com)
- ◆ **Erie:** [www.erieco.gov](http://www.erieco.gov)

#### **Program Changes**

None

#### **Budget**

Funds are identified in MCM 1.

# MCM 3 - Illegal Discharge Detection and Elimination

## Permit Requirement

The 2008-2013 permit requires:

*The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 61.2) into the permittee's MS4. Illicit discharges do not include discharges or flows from firefighting activities, or other activities specifically authorized by a separate CDPS permit. The permittee must:*

- 1) Develop and maintain a current storm sewer system map, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls.
  - a. To the extent allowable under State or local law, effectively prohibit, through ordinance or other regulatory mechanism, illicit discharges (except those identified in subparagraph 5 and 6 of this section) into the storm sewer system, and implement appropriate enforcement procedures and actions.**
- 2) Develop, implement, and document a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components: procedures for locating priority areas likely to have illicit discharges, including areas with higher likelihood of illicit connections; procedures for tracing the source of an illicit discharge; and procedures for removing the source of the discharge.*
- 3) Develop and implement a program to train municipal staff to recognize and appropriately respond to illicit discharges observed during typical duties. The program must address who will be likely to make such observation and therefore receive training, and how staff will report observed suspected illicit discharges.*
- 4) Specific Deadline for Renewal Permittees: Renewal Permittees must comply with the requirement of subparagraph (4) by no later than December 31, 2009.*
- 5) Address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if the permittee identifies them as significant contributors of pollutants to the permittee's MS4: landscape irrigation, lawn watering, diverted stream flows, irrigation return flow, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, springs, flows from riparian habitats and wetlands, water line flushing, discharges from potable water sources, foundation drains, air conditioning condensation, water from crawl space pumps, footing drains, individual residential car washing, dechlorinated swimming pool discharges, and water incidental to street sweeping (including associated sidewalks and medians) and that is not associated with construction.*

*The permittee may also develop a list of occasional incidental non-stormwater discharges similar to those in the above paragraph, (e.g., non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected (based on information available to the permittee) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive water bodies, BMPs, etc.). The permittee must document in their program any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4.*

- 6) The following sources are excluded from the prohibition against non-stormwater discharges and the requirements of subsections (2) and (3) above:
  - a. Discharges resulting from emergency firefighting activities. Such discharges are specifically authorized under this permit (see Part I.A.2)**



b. *Discharges specifically authorized by a separate CDPS permit.*

### **Program Objective**

*Detecting and Eliminating Improper or Illegal Connections and Discharges:* A cost-effective way to reduce some of the worst stormwater pollutants is to identify and eliminate illegal connections and discharges.

### **Program Implementation**

The Keep it Clean Plan includes public and municipal employee education training, spill response, and regulatory language to control illegal discharges. In addition, public information material discusses the impacts of spills on water quality and lists a hotline for reporting illegal discharges.

The maintenance of the outfall map, the response to discharges, and enforcement is performed by the individual KICP Partners.

### **Outfall Map**

All KICP Partners have completed their outfall maps, which are updated on an as-needed basis.

The CDPS Stormwater Management Program Description document submitted by KICP in October 2008 details the individual Partners' process for updating outfall maps.

### **Regulatory Mechanism**

All KICP Partners have illegal discharge ordinances in place. The following table includes web links to the Partners' ordinances.

<b>Partner</b>	<b>Ordinance Adopted</b>	<b>Web Link</b>
Boulder	December 6, 2004	<a href="#">Boulder Revised Code 1981, Title 11, Chapter 5, Section 5 (b) (BRC 11-5-5b)</a>
Longmont	January 12, 2005 April 2009 August 2011	<a href="#">Chapter 14.26, Stormwater Illicit Discharges and Permit Requirements</a>
Lafayette	2005 2011	<a href="#">Ordinance No. 13, Series 2011</a>
Boulder County	September 13, 2005	<a href="#">Ordinance no. 2005-1, Ordinance Concerning Illicit Stormwater Discharge</a>
Louisville	December 21, 2004	<a href="#">Title 13, Water/Sewer, Chapter 13.36</a>
Erie	November 9, 2004 2009	<a href="#">Title 8, Chapter 4, Illicit Discharges and Storm Water Quality Permit Requirements</a>
Superior	December 13, 2004	<a href="#">Chapter 11, Article IV</a>

### **Illicit Discharge Detection and Elimination Plan**

Each KICP Partner has developed and is implementing a plan that addresses illicit discharges and illegal dumping to their storm drainage systems. The plans include the following three components: procedures for locating priority areas likely to have illicit discharges, procedures for tracing the source of an illicit discharge, and procedures for removing the source of the discharge. In addition, Boulder County's Partners for a Clean Environment (PACE) Program assists in identifying illicit and threatened discharges. They educate the offender and refer the information to the enforcing community. Discharges that are unknown or hazardous in nature are responded to by the local municipal fire department with assistance from the County's Environmental Emergency Response Team.

The CDPS Stormwater Management Program Description document submitted by KICP in October 2008 details the individual Partners description of plans and procedures in place for locating, tracing, and removing illicit discharges.

The Keep it Clean Partners individually track their illegal discharges.

The Boulder County Environmental Emergency Response Team (EERT), which responds to hazardous material and other spills, contributes to the effort as well.

### **Illicit Discharge Enforcement Actions**

<b>Partner</b>	<b>Totals</b>	<b>Enforcement Actions</b>
Boulder	26	8 written, 5 verbal, 13 beyond PACE
Longmont	42	1 fine, 28 written, 9 verbal, 4 cleanup
Lafayette	4	1 fine, 3 written
Boulder County	5	1 written, 4 verbal
Louisville	3	2 fine, 1 written
Erie	10	1 fine, 9 verbal
Superior	159	70 written, 89 verbal
<b>Total</b>	<b>249</b>	<b>227*</b>

\* includes only verbal and written

### **Illicit Discharge Education to Businesses**

The Partners for a Clean Environment (PACE) Program reaches restaurants, vehicle service facilities, and other businesses that have the potential to adversely impact water quality. Outreach is performed either by direct personal contact, educational materials, or web resources.

The Keep it Clean Partners contract with the Boulder County Partners for a Clean Environment (PACE) Program to provide stormwater pollution prevention education and materials to businesses operating in the KICP communities. Major work elements performed by PACE in 2011 for KICP are outlined below.

### **About PACE**

PACE offers a pollution prevention certification program to various business sectors and has expanded outreach efforts beyond the certification program. PACE services are offered free of charge to businesses.

The six program areas implemented to address business activities with stormwater impacts are:

1. Restaurants and Vehicle Service
2. Gas Stations
3. Carwashes
4. PACE Allies
5. Property Management
6. Beyond PACE

Annually, the Keep it Clean Partners assign priority to these programs for their communities. Based on these priority rankings, each KICP community receives a customized scope of work. Each of these programs is described below, along with the results achieved in 2011.

### **Restaurants and Vehicle Service**

For over 16 years, PACE has delivered educational outreach on a range of topics, including energy efficiency, water conservation, and resource management to businesses in Boulder County. For the past eight years, PACE has included stormwater protection messages in its outreach to restaurants, auto repair facilities, and retail businesses in support of the KICP. While the majority of the businesses in these sectors have been contacted by PACE, repeated visits are typically necessary to counteract factors like employee turnover and simple apathy.

PACE conducted site visits, which provided one-on-one technical assistance to educate businesses, identify stormwater impacts, and identify solutions.

#### **Restaurants and Vehicle Service Outreach**

<b>Partner</b>	<b>Restaurants visits (total)</b>	<b>Vehicle Service visits (total)</b>	<b>Retail visits (total)</b>
Boulder	30 (203)	15 (73)	20 (378)
Longmont	0 (183)	13 (66)	34 (341)
Lafayette	7 (58)	4 (16)	4 (78)
Boulder County	7 (52)	4 (19)	4 (97)
Louisville	4 (39)	5 (14)	3 (73)
Erie	5 (16)	3 (9)	2 (49)
Superior	4 (20)	1 (7)	2 (37)
<b>Total</b>	<b>57 (571)</b>	<b>45 (204)</b>	<b>69 (1,053)</b>

### **Carwashes and Gas Stations**

In 2011, PACE continued outreach to gas stations that had not previously received a visit. Additionally, PACE followed up with the 10 corporate contacts that received a letter in 2010.

### Gas Station Outreach

<b>Partner</b>	<b>Gas Stations visits (total)</b>
Boulder	5 (26)
Longmont	5 (27)
Lafayette	3 (10)
Boulder County	0 (3)
Louisville	3 (4)
Erie	1 (2)
Superior	1 (3)
<b>Total</b>	<b>18 (75) 24% visited</b>

PACE has visited 63% of the gas stations in Boulder County and portions of Weld County since 2010.

In 2011, PACE distributed an additional 28 signs featuring H<sub>2</sub>O Jo to carwashes. A total of 44 signs thanking customers for using commercial carwashes have been installed in the KICP communities. This approach supports the KICP H<sub>2</sub>O Jo and tributary sign branding efforts.

### Carwash Outreach

<b>Partner</b>	<b>Carwash Signs</b>
Boulder	19
Longmont	11
Lafayette	7
Boulder County	0
Louisville	6
Erie	1
Superior	0
<b>Total</b>	<b>44</b>

### **PACE Allies**

The PACE Allies program was developed as a mechanism for working with service providers that do not fit the traditional PACE model of businesses – of being in a fixed location. Service providers like mobile cleaners and landscape maintenance companies can affect a business's ability to comply with stormwater ordinances. Certifying these service providers will allow PACE to present businesses with a list of service providers that understand and are able to follow stormwater BMPs.

PACE worked with the Boulder County Public Health marketing and communications manager to identify barriers to participation and implement strategies to reduce the barriers.

- Restructured the letter to include more of a marketing approach vs. informational letter regarding regulations.
- Included an application with the letter for businesses to complete to become an ally.
- Created an online application so in future correspondence businesses can be directed to our website.

The letters were followed up with phone calls.

#### Carpet Cleaners

- 24 businesses were followed up with, but only 10 had a successful contact.
- 8 were interested.
- 1 application was received.
- All interested businesses were emailed a link to the test.
- A second round of follow-up calls/emails are in progress to schedule follow-up visits for those who have taken test or may need another prompt. This work flows into the 2012 contract hours.

#### Hood Cleaners

- 14 businesses were followed up with, but only 9 had a successful contact.
- 8 were interested.
- 1 application was received, and 1 test has been completed.
- Businesses were very interested in recognition via the list for restaurants and the website.
- A second round of follow-up calls/emails are in progress to schedule follow-up visits for those who have taken test or may need another prompt. This work flows into the 2012 contract hours.

#### Mobile Cleaners

- 10 businesses were followed up with, but only 4 had a successful contact.
- 4 were interested in participating.
- 2 applications were received, and 1 test has been completed.
- Businesses were very interested in recognition via the list for restaurants and the website.
- A second round of follow-up calls/emails are in progress to schedule follow-up visits for those who have taken test or may need another prompt. This work flows into the 2012 contract hours.

Recommendations for the Allies Programs:

1. Conduct follow-up in the first part of 2012 before sending another letter.
2. Survey participating businesses as to incentive ideas to increase participation.
3. Continue to evaluate barriers to success.

#### **Landscape Maintenance**

- Landscapers were contacted via a letter and phone call or email follow-up. Businesses that responded or PACE visited were receptive to the program.
- Most businesses wanted recognition for their “green” practices as well as stormwater compliance. The most successes were with larger companies more of staff and equipment.

- The main barriers to certification this year were meeting with people in the field and follow-up with the businesses.
- One lawn care company had a thorough site visit as was interested in PACE; still working to schedule a follow-up field observation to complete their requirements for the Allies Program.
- Small, individually owned landscapers and lawn maintenance companies were more challenging to both contact and encourage participation. They were both very busy most of the year, and they also seem uninterested in participating in the PACE Allies Program.

**Recommendations:**

1. Focus on PACE certified landscape companies.
2. Target companies referred from HOA site visits and larger, corporate companies.
3. Use the “Application” format piloted in 2011 with the other Allies programs.
4. Create an online module to make it more accessible.
5. Continue to evaluate barriers to success.

**Property Managers**

Property managers can often have a greater impact on stormwater quality than the individual tenants or property owners. Property managers are typically responsible for the cleaning of parking areas and building exteriors, providing and maintaining dumpsters, and servicing HVAC equipment. In 2011, the outreach to property managers was expanded to include information on permanent water quality structures and focused primarily on facility managers servicing multi-family complexes.

**Property Manager Outreach**

<b>Partner</b>	<b>Training Visits</b>
Boulder	4
Longmont	3
Lafayette	4
Boulder County	2
Louisville	3
Erie	1
Superior	1
<b>Total</b>	<b>18</b>

PACE also met with the environmental manager for St. Vrain Valley School District. All school district facilities are not covered under an individual permit. Only schools with a daytime population of 1,000 are covered. The remaining schools and maintenance facilities do not have oversight under individual permits.

During the site visit, PACE assisted the environmental manager by providing graphics to support posters design for the schools as part of their outreach permit requirement. PACE also conducted a site visit at the SVVSD bus maintenance facility and identified several issues.

### **Beyond PACE Outreach**

Activities that negatively impact stormwater quality are frequently observed in non-PACE sectors. The hours provided by the KICP Partners allow PACE to respond to these incidents and provide educational outreach on regulations and BMPs. The outreach was conducted at the request of a KICP community or when observed by PACE staff when working in the field.

PACE staff documented the incidents and forwarded the information to the appropriate KICP community personnel. At the end of the 3<sup>rd</sup> quarter, PACE notifies the Keep it Clean Partners with remaining hours and asks that they identify specific geographic business areas to be targeted by PACE for outreach.

#### **Beyond PACE Outreach**

<b>Partner</b>	<b>Actual Hours</b>
Boulder	32
Longmont	30.5
Lafayette	8.5
Boulder County	9
Louisville	6
Erie	4
Superior	3
<b>Total</b>	<b>93</b>

**Municipal Staff Education**

PACE provides yearly and as-requested training to KICP Partners' municipal staff on observing and reporting illicit discharges. This training is provided to field personnel during classroom and/or tailgate sessions.

**Number of Employees Trained per Municipality and Department**

<b>Partner</b>	<b>Fleets</b>	<b>Public Works/ Streets</b>	<b>Parks/ Golf</b>	<b>Facility Maintenance</b>	<b>WWTP and Contractors</b>	<b>Total</b>
Boulder		7	37		52	<b>96</b>
Longmont		3	24			<b>27</b>
Lafayette	3	16	14		4	<b>37</b>
Boulder County			51	8		<b>59</b>
Louisville		14	21	1		<b>36</b>
Erie		9	16			<b>25</b>
Superior		3	3		5	<b>11</b>
<b>Total</b>	<b>3</b>	<b>52</b>	<b>166</b>	<b>9</b>	<b>61</b>	<b>291</b>

**Hazardous Material Management Facility Waste Disposal Program**

All of the Keep it Clean Partners sign an intergovernmental agreement to participate in the countywide Hazardous Material Management Facility (HMMF) Program. The shared cost for implementing the HMMF Program is separate from the KICP Program, and therefore is not included in the MCM's budget. In 2011, the HMMF expanded its services to accept business waste.

**Program Changes**

None

**Budget**

Proposed: \$84,164

Actual: \$77,218

Unexpended funds: \$6,946



# MCM 4 - Construction Site Stormwater Runoff Control

## Permit Requirement

The 2008-2013 permit requires:

*The permittee must:*

- 1) Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff, and to reduce pollutants in, or prevent when required in accordance with I.B.3, non-stormwater discharges that have the potential to result in water quality impacts (e.g., construction dewatering, wash water, etc.), to the MS4 from construction activities that result in a land disturbance of one or more acres. Reduction of pollutants in discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one or more acres. If the Division waives requirements for stormwater discharges associated with a small construction activity in accordance with 61.3(2)(f)(ii)(B) (the "R-Factor" waiver), the permittee is not required to develop, implement, and/ or enforce its program to reduce pollutant discharges from such a site.*
- 2) Develop and implement the program to assure adequate design, implementation, and maintenance of BMP's at construction sites within the MS4 to reduce pollutant discharges and protect water quality. The program must include, at a minimum, the development, implementation, and documentation of:*
  - i) Program Requirements, including:*
    - A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions and procedures adequate to ensure compliance, to the extent allowable under State or local law.*
    - B) Requirements for construction site operators to implement appropriate erosion and sediment control BMP's.*
    - C) Requirements for construction site operators to implement BMP's to control waste such as discarded building materials, concrete truck washout, chemicals, litter, sanitary waste, and other non-stormwater discharges including construction dewatering and wash water, at the construction site that may cause adverse impacts to water quality.*
  - ii) Compliance Assessment, including:*
    - A) Procedures for site plan review which incorporate consideration of potential water quality impacts.*
    - B) Procedures for construction site compliance assessment, including*
      - 1) Site inspections; and*
      - 2) Receipt and consideration of information submitted by the public.*
  - iii) Compliance Assurance, including:*
    - A) Procedures for enforcement of control measures that includes documented procedures for response to violations of the permittee's program requirements. Procedures must include specific processes and sanctions adequate to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measures.*
- 3) Specific Deadline for Renewal Permittees: Renewal Permittees must comply with the requirement of subparagraph*
  - A) to develop, document and implement response procedures that specifically address chronic and recalcitrant violators by no later than December 31, 2009.*
  - B) An education and training program for municipalities, their representatives and/or construction contractors. At a minimum, the program must include an information program for construction site operators unfamiliar with the reviewing authority's regulatory requirements.*

## Program Objective

*Controlling Construction Site Runoff:* Effective construction site pollution prevention can dramatically reduce sediment loading to stream ecosystems. An effective erosion control program must include adequate ordinance language, effective inspection and enforcement, and appropriate development and construction standards.

## Program Implementation

The Keep it Clean Plan includes all of the previously mentioned components. In addition, the Keep it Clean Plan includes contractor training and a certification program. These program elements ensure consistent countywide education and minimum standards.

## Regulatory Mechanism

All KICP Partners have construction ordinances in place. The following table includes web links to the Partners' ordinances.

Partner	Ordinance Adopted	Web Link
Boulder	December 6, 2004	<a href="#">Boulder Revised Code 1981, Title 11, Chapter 5, Section 5 (b) (BRC 11-5-5b)</a>
Longmont	January 12, 2005 June 2009 August 2010	<a href="#">Chapter 14.26, Stormwater Illicit Discharges and Permit Requirements</a>
Lafayette	2005 2011	<a href="#">Ordinance No. 13, Series 2011</a>
Boulder County	August 11, 2005	<a href="#">Article 7, Development Standards</a>
Louisville	December 21, 2004	<a href="#">Title 13, Water/Sewer, Chapter 13.36</a>
Erie	November 9, 2004	<a href="#">Title 8, Chapter 4, Illicit Discharges and Storm Water Quality Permit Requirements</a>
Superior	December 13, 2004	<a href="#">Chapter 11, Article IV</a>

## Requirements for Construction Site Operators to Implement Appropriate Erosion Control BMPs

All KICP Partners' ordinances require that stormwater management plans meet the requirements of the CDPS General Permit for Stormwater Discharges Associated with Construction Activities (Stormwater Construction Permit). All KICP Partners ordinances require that BMPs are designed to meet the technical standards of:

Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual Volume 3-BMP or its successor.

Any other alternative methodology approved by the jurisdiction, which is demonstrated to be effective.

In 2010, Urban Drainage and Flood Control finalized the updating of Volume 3.

**Requirements for Construction Site Operators to Control Waste including Discarded Building Materials, Concrete Truck Washout, Chemicals, Litter, and Sanitary Waste**

All KICP Partners' ordinances require that stormwater management plans meet the requirements of the CDPS General Permit for Stormwater Discharges Associated with Construction Activities (Stormwater Construction Permit). The Stormwater Construction Permit requires that Stormwater Management Plans (SWMPs) include practices for stormwater pollution prevention, which includes controlling waste, such as discarded building materials, concrete truck washout, chemicals, litter, sanitary waste, and other non-stormwater discharges, including construction dewatering and wash water.

**Procedures for Site Plan Review**

All KICP Partners' ordinances require that stormwater management plans meet the requirements of the CDPS General Permit for Stormwater Discharges Associated with Construction Activities (Stormwater Construction Permit).

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' processes for construction site plan submittal, review, and preliminary approval process; the system used to track status of stormwater control site plans; procedures for ongoing review of site plans during active construction; and how consideration of potential water quality impacts are achieved.

**Procedure for Receipt and Consideration of Information Submitted by the Public**

Each KICP Partner has community specific procedures in place for receiving and recording public complaints.

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' processes for processing inquiries or tracking and documenting complaints received from the public.

**Procedures for Site Inspection and Enforcement of Control Measures.**

Each KICP Partner has community-specific procedures in place for conducting construction site inspections and enforcement. The procedures may include how inspections are conducted, documented, and how enforcement is carried out. The KICP Partners utilize verbal warnings through stop work orders. Enforcement options are described in each Partner's ordinance.

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' procedures used for inspections; it includes inspection documentation, frequency, and prioritization, and how sites and inspections are tracked. Procedures for regularly scheduled compliance inspections, complaint response inspections, and reconnaissance inspections (as applicable) are described. In addition, procedures used for enforcement, to include any documentation used that dictates responses to non-compliance; tracking of enforcement actions; enforcement tools; and escalation procedures for chronic and recalcitrant violators are described.

### Construction Inspections and Enforcement

Partner	Number of Active Construction Sites Over an Acre	Number of Inspections	Enforcement Actions
Boulder	24	Full -317 Reconnaissance - 1205	15 written, 24 verbal
Longmont	39	Full -280 Reconnaissance - 18	3 written, 21 verbal
Lafayette	13	Full -82 Reconnaissance - 433	2 stop work, 85 written, 6 verbal
Boulder County	12	Full -9 Reconnaissance- 18	12 verbal
Louisville	8	Full - 86	17 written
Erie	21	Full - 0 Reconnaissance - 450	10 written, 45 verbal
Superior	15	Full - 1 Reconnaissance - 223	13 written, 30 verbal
<b>Total</b>	<b>132</b>	<b>Full - 775 Reconnaissance - 2,347</b>	<b>281*</b>

\*Includes only written and verbal

### Training and Education for Construction Site Operators

Each KICP Partner informs construction site operators of the regulatory requirements during the pre-construction meeting. The KICP website has a page specific to construction and lists link to each Partner's ordinance. The KICP Partners offer construction site stormwater management trainings, which are open to both municipal and private entities.

The KICP has been implementing a training program for construction site operators and inspectors since 2003. Most of the Keep it Clean Partners require, by ordinance, that the individuals inspecting erosion control and sediment removal practices be certified by an acceptable program.

Twenty-four individuals from the private and public construction sector participated in the Keep it Clean erosion control certification training.

### Program Changes

KICP is now offering Colorado Department of Transportation erosion control certification.

### Budget

Proposed: \$23,353

Actual: \$20,390

Unexpended funds: \$2,963

# MCM 5 - Post-Construction Stormwater Management

## Permit Requirement

The 2008-2013 permit requires:

*The permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The permittee must:*

- 1) Develop, implement, and document strategies which include the use of structural and/or non-structural BMPs appropriate for the community that address the discharge of pollutants from new development and redevelopment projects, and/or that maintain or restore hydrologic conditions at sites to minimize the discharge of pollutants and prevent in-channel impacts associated with increased imperviousness;*
- 2) Use an ordinance or other regulatory mechanism to address post- construction runoff from new development and redevelopment projects to the extent allowable under State or local law;*
- 3) Develop, implement, and document procedures to determine if the BMPs required under Item (1), above, are being installed according to specifications. (This may be developed in conjunction with the Construction program area, as described in Part I.B.4);*
- 4) Develop, Implement, and document procedures to ensure adequate long-term operation and maintenance of BMPs, including procedures to enforce the requirements for other parties to maintain BMPs when necessary;*
- 5) Develop, implement, and document an enforcement program, which addresses appropriate responses to common noncompliance issues, including those associated with both installation (subparagraph (3), above) and long term operation and maintenance (subparagraph (4), above) of the required control measures;*
- 6) Develop and implement procedures and mechanisms to track the location of and adequacy of operation of long-term BMPs implemented in accordance with the program.*

## Program Objective

*Addressing Stormwater in New Development and Redevelopment:* It is estimated that when a tributary drainage basin reaches 10–20 percent impervious, there are significant ecological stresses on the aquatic ecosystem. Therefore, the most important strategy for addressing stormwater is to focus on land use and development. One of the best strategies is to address the aggregate amount of new impervious surfaces and disconnecting impervious areas. Other strategies include implementing effective best management practices (BMPs) for the control and treatment of site runoff, such as stormwater detention or grass swales. An effective post-construction program must include adequate ordinance language, effective inspection, and enforcement.

### **Program Implementation**

The Keep it Clean Plan includes all of the aforementioned components. In addition, the Keep it Clean Partners continue to educate municipal staff and the private sector in the advantages of infiltration BMPs. The 2008-2013 permit language includes added language to strengthen the goal of implementing BMPs that would benefit water quality over time and attempt to reduce the impact of land development.

### **Regulatory Mechanism**

All Keep it Clean Partners have post-construction ordinances in place. The following table includes web links to the Partners' ordinances.

<b>Partner</b>	<b>Ordinance Adopted</b>	<b>Web Link</b>
Boulder	December 6, 2004	<a href="#">Boulder Revised Code 1981, Title 11, Chapter 5, Section 5 (b) (BRC 11-5-5b)</a>
Longmont	January 12, 2005 June 2009 August 2010	<a href="#">Chapter 14.26, Stormwater Illicit Discharges and Permit Requirements</a>
Lafayette	2005 2011	<a href="#">Ordinance No. 13, Series 2011</a>
Boulder County	August 11, 2005	<a href="#">Article 7, Development Standards</a>
Louisville	December 21, 2004	<a href="#">Title 13, Water/Sewer, Chapter 13.36</a>
Erie	November 9, 2004	<a href="#">Title 8, Chapter 4, Illicit Discharges and Storm Water Quality Permit Requirements</a>
Superior	December 13, 2004	<a href="#">Chapter 11, Article IV</a>

### **Design Criteria and Standards**

All KICP Partners, by ordinance, have required BMPs designed to meet the technical standards of:

Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual-Volume 3 BMP or its successor.

Any other alternative methodology approved by the jurisdiction that is demonstrated to be effective.

### **Review and Approval Procedures**

Each KICP Partner has community-specific procedures and requirements in place that address how plans for both public and private BMPs are tracked, reviewed, and confirmed as built.

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' procedures for plan review process; the systems implemented to track status of plans; how correct installation of BMPs is confirmed; and the enforcement procedures used when BMPs have not been built as approved.

### **Tracking**

Each KICP Partner has a system to track permanent BMP locations and requirements for maintenance of BMPs installed since the adoption of their ordinance.

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' procedures for tracking permanent BMP locations and maintenance history.

#### **Ensuring Operation and Maintenance**

Each KICP Partner has community-specific procedures in place for conducting BMP inspections and enforcement. Each KICP Partner has community-specific procedures for enforcement. Enforcement options are described in each Partner's ordinance.

The CDPS Stormwater Management Program description document submitted by KICP in October 2008 details the individual Partners' inspection programs, including routine and complaint response inspections.

#### **Post-Construction Inspection and Enforcement**

<b>Partner</b>	<b>Number of New BMPs in 2011</b>	<b>Total Number of Existing BMPs</b>	<b>Number of BMPs Inspected</b>	<b>Number of BMP Inspections</b>	<b>Enforcement Actions</b>
Boulder	11	116	116	116	2
Longmont	13	76	10	10	1
Lafayette	1	8	1	1	0
Boulder County	0	8	8	8	0
Louisville	2	19	19	19	0
Erie	1	6	6	10	0
Superior	0	36	26	230	0
<b>Total</b>	<b>28</b>	<b>269</b>	<b>186</b>	<b>394</b>	<b>3</b>

#### **Program Changes**

None

#### **Budget**

Proposed: \$9,016

Actual: \$8,592

Unexpended funds: \$424

# MCM 6 - Pollution Prevention and Good Housekeeping for Municipal Operations

## Permit Requirement

The 2008-2013 permit requires:

*The permittee must develop and implement an operation and maintenance program that includes an employee training component and has the ultimate goal of preventing or reducing pollutants in runoff from municipal operations. The program must also inform public employees of impacts associated with illegal discharges and improper disposal of waste from municipal operations. The program must prevent and/or reduce stormwater pollution from facilities such as streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the permittee, and waste transfer stations, and from activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable. The permittee must:*

- 1) Develop and maintain written procedures for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee's municipal operations. The program must specifically list the municipal operations (i.e., activities and facilities) that are impacted by this operation and maintenance program. The program must also include a list of industrial facilities the permittee owns or operates that are subject to separate coverage under the State's general stormwater permits for discharges of stormwater associated with industrial activity;
  - i. Specific Deadline for Renewal Permittees: Renewal Permittees must comply with the requirement of subparagraph (1) by no later than December 31, 2009.**
- 2) Develop and implement procedures to provide training to municipal employees as necessary to implement the program under Item 1, above.*

## Program Objective

*Implementing Pollution Prevention for Municipal Operations.* A surprising number of municipal operations can affect water quality and quantity. These activities range from the storage and handling of harmful chemicals to the maintenance of municipal properties, vehicles, roads, and storm sewer systems. Activities like integrated pest management, water conservation, recycling, and education programs can prove to be very effective in addressing these pollutant sources.

## Program Implementation

The KICP provides an education and compliance program through the Partners for a Clean Environment (PACE) Program for municipal operations.

### Implementation of an Operation and Maintenance Program

The Partners for a Clean Environment (PACE) Program provides a stormwater pollution prevention program to KICP Partners' municipal facilities through an inspection and certification program. Certification is based on criteria developed specifically for the facility through industry standards and municipal staff recommendations. Facilities are targeted based on potential to impact water quality. PACE conducts yearly or biannual audits of municipal operations to ensure that procedures are being implemented that meet the self-imposed certification program. PACE notifies the facility or operations manager, as well as the KICP Partner's stormwater manager, if any deficiencies are noted during sites visits.



The Keep it Clean Partners contracts with the PACE Program to develop a compliance program for municipal operations. The following outlines a summary of activities completed in 2011.

### **Outreach to Municipal Operations**

In 2011, 77 site visits were conducted at municipal facilities in the KICP communities. Site visits involved walking around the facility; performing an audit of stormwater BMPs; documenting non-compliance issues; taking photographs (that were later used for training staff); completing PACE's criteria checklist; sending follow-up letters with photos and information on areas for improvement, proper BMPs; and overall compliance with stormwater regulations.

**Site Visits per Municipality**

<b>Partner</b>	<b>Completed Site Visits Tier 1</b>	<b>Completed Site Visits Tier 2</b>
Boulder	14	7
Longmont	10	2
Lafayette	5	2
Boulder County	11	6
Louisville	6	3
Erie	4	1
Superior	4	2
<b>Total</b>	<b>54</b>	<b>23</b>

### **Municipal Employee Stormwater Training Program**

PACE provides yearly and as-requested training to municipal staff on operational BMPs and on observing and reporting illicit discharges. This training is provided to field personnel during classroom and/or tailgate sessions.

Newsletters and recognition programs may be used to support this effort.

PACE has designed several training approaches to ensure the most effective approach for the target audience.

### **Municipal Employee Training**

Two different stormwater training presentations have been developed for the different municipal sectors: *Stormwater 101* for Tier 1 Operations (fleet, parks, golf course, street and storm drain maintenance), and *Stormwater 102* for Tier 2 Operations (municipal fire departments, building & facilities maintenance departments). Both trainings provide basic information on stormwater compliance, illicit discharge identification and reporting, local contact information, and best management practices to prevent stormwater pollution. The "*Storm Watch*" video, created in 2006 for KICP/PACE, is viewed during the training classes. The *Stormwater 101* and *102* presentations can be found at [www.pacepartners.com](http://www.pacepartners.com).

### **Tailored, On-site Training**

These customized, on-site trainings required PACE staff to visit the facility before the training to take photos of stormwater issues/concerns, good housekeeping measures, and/or BMPs. The photos were then incorporated into a customized presentation. This approach helps employees to recognize and take ownership of stormwater issues at their job sites. It also provides PACE staff with a chance to conduct a site visit for stormwater compliance. Employees that implemented BMPs or good housekeeping measures were recognized by rewards of gift certificates, and their names were listed in the winter *Stormwater* newsletter (See “Employee Recognition” below). PACE staff then returned to the facility to ensure issues were addressed, or they requested that the manager contact them when the matter was resolved.

### **Tailgate Training or Beyond PACE Site Visits Trainings**

“Tailgate” training sessions were conducted with municipal and contracted employees where PACE would observe daily field operations and provide input on stormwater issues. These tailgate sessions allowed PACE staff to better understand the challenges to stormwater pollution prevention on the job and to observe standard operating procedures. PACE staff would also conduct “impromptu”, in-the-field, training opportunities when they observed municipal employees or contractors performing maintenance work without implementing stormwater protection best management practices. PACE staff would document the issues with photographs and send them to the KICP Steering Committee representative for appropriate follow-up or enforcement actions.

In total, 291 employees were trained at 12 different training sessions.

**Number of Employees Trained per Municipality and Department**

<b>Partner</b>	<b>Fleets</b>	<b>Public Works/ Streets</b>	<b>Parks/ Golf</b>	<b>Facility Maintenance</b>	<b>WWTP and Contractors</b>	<b>Total</b>
Boulder		7	37		52	<b>96</b>
Longmont		3	24			<b>27</b>
Lafayette	3	16	14		4	<b>37</b>
Boulder County			51	8		<b>59</b>
Louisville		14	21	1		<b>36</b>
Erie		9	16			<b>25</b>
Superior		3	3		5	<b>11</b>
<b>Total</b>	<b>3</b>	<b>52</b>	<b>166</b>	<b>9</b>	<b>61</b>	<b>291</b>

## **Municipal Employee Recognition Program**

The Municipal Employee Recognition Program, or “*Stormwater Heroes*” program, was designed to increase municipal staff’s knowledge and awareness of stormwater pollution prevention so they would participate in water protection behaviors. The program was also intended to empower staff to protect local water quality and to recognize that the work that they do directly affects water quality. PACE recognized employees who protected storm drains, implemented BMPs to prevent stormwater pollution, or reported illegal discharges with awards, such as stickers, water bottles, names in newsletters, and/or gift certificates. Community-based social marketing techniques were utilized to change employee behavior.

The Municipal Employee Pledge Program was developed to create ownership and to motivate employees to take actions to protect storm drains and keep our water clean. Employees were asked during stormwater training sessions to pledge to “Keep It Clean.” They receive a printed pledge form to remind them of their pledge and a water bottle as a prompt. The employees signed their pledge on a tear-off slip at the bottom, which was kept by PACE staff for recordkeeping. The three pledge actions are:

1. *Locate and Protect* storm drains near work site.
2. *Cover and Contain* any materials stored outside and *Clean Up* spills.
3. *Report* any pollutants that may enter storm drains.

### Accomplishments

- ◆ 6 *Stormwater Heroes* were announced in two semi-annual newsletters.
- ◆ Two \$25 gift certificates were distributed to 4 *Stormwater Heroes* via a raffle.
- ◆ Five \$15 gift certificates were distributed to training attendees via a raffle.
- ◆ 50 “*Protect Storm Drains*” stickers were distributed during trainings and site visits.
- ◆ 25 “*Keep it Clean*” static-cling window decals were distributed during trainings and site visits.
- ◆ 16 “*Keep it Clean*” Pledge travel mugs or water bottles were distributed.
- ◆ 188 employees signed the “*Keep it Clean*” Municipal Employee Pledge.
- ◆ 2 *Stormwater Newsletters* were written and distributed via e-mail to approximately 280 employees and posted on [www.pacepartners.com](http://www.pacepartners.com) website. The newsletter contained articles of interest, recognized operation(s) that had the most improvement in stormwater BMPs, and identified the operations most in need of improvement.

## **Target Pollutant Program**

In 2009, the Keep It Clean Partnership identified five “target” pollutants including: E. coli, sediment, Poly-Aromatic Hydrocarbons (PAHs), fertilizers, pesticides, and petroleum products. In 2011, the Target Pollutant Program included special projects as requested by the KICP Steering Committee and was renamed the “Opportunity Fund.”

In 2011, PACE staff completed the following programs in the “Target Pollutant/Opportunity Fund” program:

- Designed, printed, and distributed 20 “Fuel Spill Clean-up Procedures” signs to KICP Partners’ fueling sites.
- Conducted 12 “Beyond Site Visits” customized, in-field trainings, educating 28 employees and/or contractors.
- Reviewed EPA’s and Colorado’s Pesticide General Permit requirements. An email message was sent to parks and golf course departments making them aware of the permits.

- PACE continued research on best management practices for proper discharge of fire suppression system wastewater from new buildings and from annual testing. PACE reviewed and commented on guidance documents from CDPHE and from the Colorado Division of Fire Safety on these types of discharges. Also updated PACE's BMPs, SOPs, and Resource Sheets on [www.pacepartners.com](http://www.pacepartners.com).
- Created smart sheet spreadsheets to track Tier-1 site visits, Tier-2 site visits, and stormwater training classes in each KICP community. PACE used the "smart sheets" to upload photos and follow-up letters from site visits or in-field observations and to communicate with the KICP Steering Committee on stormwater concerns in their community. KICP Steering Committee members were able to log in the online spreadsheets and view all data fields, letters, and photos.

In 2012, PACE will address the top five stormwater issues (per type of operation) while conducting site visits and will develop a compliance rating tool to determine each facility's compliance with the top five issues. Ratings will be given for compliance with desirable behaviors and will be tracked. PACE will also assess and track barriers to compliance.

The top stormwater issues are:

1. Spills or leaks (vehicles, gas, oil, hydraulic fluid, or other chemicals).
2. Cover and containment (of hazardous liquids, containers, drums, batteries or other dry materials).
3. Outdoor materials storage and handling (vehicles, dirt piles, debris, trash, mag chloride, salt/sand, chemicals, oil, diesel, gasoline, or other products).
4. Good housekeeping concerns (trash, dumpsters not covered, areas not swept, debris, BMP maintenance).
5. Outdoor washing or cleaning (washing of vehicles, sidewalks, buildings, pressure washing etc.).
6. Application of chemicals (pesticides, fertilizers, salt, liquid deicer, paint, or chemical products).
7. Discharges from operations, sites, spills and/or reporting illegal discharges.

The 2012 PACE/KICP Scope of Work also includes:

- 41 Tier 1 site visits
- 15 Tier 2 site visits
- 9 stormwater training classes
- Develop compliance rating tool for top 5 issues/behaviors
- Opportunity Fund Projects:
  - Developing compliance rating and barriers tool
  - Assistance with new fire suppression requirements
  - Assistance with Colorado General Pesticide Permit
  - Assistance with Colorado Stormwater Rule
  - "Beyond PACE Site Visits" training opportunities
  - Planning for next 5-year permit
  - Updating BMP and SOP documents with new regulatory requirements

**Program Changes**

None

**Budget**

Proposed: \$80,510

Actual: \$77,339

Unexpended funds: \$3,171

# Partnership Working Agreement

## **Keep it Clean Partners Are:**

- Dedicated to the stated goals and objectives of the project.
- Active participants, attending meetings and voicing opinions equally.
- Willing to share resources and data.
- Clear about their agencies' needs and interest in participating in the project.
- Completing the bulk of KICP work in subgroups.

## **Keep it Clean Partners Will:**

- Be prompt to meetings and participate to the highest level of their ability.
- Maintain focus, prioritize all actions, and encourage involvement of all.
- Understand that not all communities have the resources to attend every meeting.
- Complete assigned tasks that are agreed upon in the group.
- Stay informed about discussions and decisions that take place at Keep it Clean meetings in their absence.

## **Keep it Clean Partners Are:**

- Participating in good faith and working towards the identified common goals and objectives.
- Committed to the protection of water quality within the Boulder Creek and St. Vrain River watersheds.
- Committed to sharing information and resources with other Keep it Clean Partners.
- Committed to developing strategies and solution that benefit the general public and represent the shared goals and objectives of the KICP.

## **Keep it Clean Partnership Decisions:**

- Will be discussed in an organized manner and the process will be open to all.
- Will be made by consensus, an approach to find an inclusive solution that everyone can support.

## **Keep it Clean Partners:**

- Understand compromise may be necessary to reach Keep it Clean common goals.
- Show a commitment to mediate disagreement.

## Partner Contact Information

### **KICP Coordinator**

Janice Lopitz, KICP Coordinator  
Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304  
303-441-1439  
jlopitz@bouldercounty.org

### **City of Boulder**

Brian Campbell, Civil Engineer  
City of Boulder Public Works  
1739 Broadway, Suite 300  
Boulder, CO 80306-0791  
303-441-3121  
campbellb@bouldercolorado.gov

Donna Scott, Stormwater Quality Specialist  
City of Boulder Water Quality  
4049 75th Street  
Boulder, CO 80301  
303-413-7364  
scottd@bouldercolorado.gov

### **County of Boulder**

Dave Webster, Engineer  
Boulder County Transportation/Engineering  
P.O. Box 471  
Boulder, CO 80306  
720-564-2660  
dwebster@bouldercounty.org

Mark Williams, Water Quality Coordinator  
Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304  
303-441-1143  
mwilliams@bouldercounty.org

### **Town of Erie**

Wendi Palmer, Engineer  
Town of Erie  
645 Holbrook  
Erie, CO 80516  
303-926-2875  
wpalmer@erieco.gov

### **City of Lafayette**

Mick Forrester, Water Reclamation Mgr.  
City of Lafayette  
1290 S. Public Road  
Lafayette, CO 80025  
303-665-5506 ext. 3571  
mickf@cityoflafayette.com

### **City of Longmont**

Cal Youngberg, Environmental Program Mgr.  
City of Longmont  
350 Kimbark Street  
Longmont, CO 80501  
303-651-8399  
cal.youngberg@ci.longmont.co.us

Ela Nelson, Civil Engineer  
City of Longmont  
350 Kimbark Street  
Longmont, CO 80501  
303-774-4390  
ela.nelson@ci.longmont.co.us

Kathryne Marko, Associate Civil Engineer  
City of Longmont  
350 Kimbark Street  
Longmont, CO 80501  
303-651-8906  
kathryne.marko@ci.longmont.co.us

### **City of Louisville**

Ken Mason, Operations Manager  
City of Louisville Public Works  
749 Main Street  
Louisville, CO 80027  
303-335-4780  
kenm@louisvilleco.gov

### **Town of Superior**

Dmitry Tepo, Utilities Coordinator  
Town of Superior  
124 East Coal Creek Drive  
Superior, CO 80027  
303-499-3675  
dmitryt@townofsuperior.com

**Other Participants**

Pam Milmoe  
Air Quality/Business Sustainability  
Coordinator  
Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304  
303-441-1189  
pmilmoe@bouldercounty.org

Erin Dodge  
Env. Health Specialist  
Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304  
303-441-1241  
edodge@bouldercounty.org

Bonnie Greenwood  
Env. Health Specialist  
Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304  
303-441-1174  
bsgreenwood@bouldercounty.org

Curry Rosato  
Watershed Outreach Coordinator  
City of Boulder Water Quality  
4049 75th Street  
Boulder, CO 80301  
303-413-7365  
rosatoc@bouldercolorado.gov

Nathan Moore  
MS4 Unit Manager  
CDPHE  
WQCD-P-B2  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
303-692-3555  
nathan.moore@state.co.us



