

Keep It Clean Partnership

2015 Annual Report

To address the impact of stormwater on water quality, the federal Clean Water Act was expanded to include requirements for municipalities to 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. It 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 primary goal of the KICP is to implement a regional stormwater management program, not only to comply with federal and state Phase II stormwater regulations, but also to address broader water quality issues. The Partners share, coordinate, and develop resources to create 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.

Into the Future

As the KICP enters its 14th year of implementation, the Partners continue to refine programs to meet the challenges of stormwater management, as well as anticipate the new requirements of the third permit, which is to be finalized in the spring of 2016.

MS4 Permit Compliance and Renewal

The current permit was set to expire in March 2013, but it was administratively extended. In 2013, CDPHE held many public draft permit concept discussions, and the KICP submitted several letters in response to the anticipated permit changes. The first draft MS4 permit was released in the summer of 2014, and KICP again sent comments. In the spring of 2015, the stakeholder process began again and culminated with the release of the second draft MS4 permit. In response, KICP submitted comments in the summer of 2015.

The final permit is anticipated to be released in early 2016. It is expected to have more specific requirements, and according to CDPHE, "the Division anticipates that the renewal permit, which has clear requirements and will allow the permittee to tailor and modify their selection and implementation of controls as needed without Division review or approval, will be more efficient for both the Division and permittees."

Collaboration and Organization

In 2015, the Partnership evaluated and then reduced the level of outreach and education for 2016 provided through the City of Boulder Watershed Program and the Boulder County Public Health (BCPH) Partners for a Clean Environment (PACE) Program. The Partners will move forward with the streamlined programs and continue to evaluate efficiencies as the effort moves from joint outreach to individual partner program implementation.

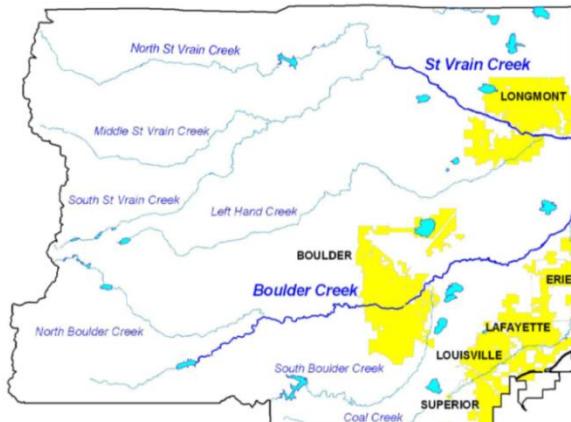


The Partners also restructured the assessment of funding contributions. The move from seven individual population-based calculations to three flat fees based on round population numbers will be implemented in 2016. In addition, the Partners chose to move fiscal agent's responsibilities from Boulder County Public Health to Boulder County. The Partnership is committed to continuing to discuss expanding efforts to encompass more of the watershed's efforts, to participate in a statewide effort to brand water quality and quantity, and to stay ahead of the regulations.

Watershed Health

The KICP will continue the efforts started in 2014 to collectively gather monitoring data from approximately 30 locations within 6 of the KICP communities. The focus of the trending analysis will be on the occurrence of nitrogen, phosphorous, and *E. coli* within the three watershed basins – Coal Creek and Rock Creek, Boulder Creek, and St. Vrain Creek.

The KICP will be required, through the MS4 permit when it is finalized, to educate the residential and municipal communities on the sources of nitrogen and phosphorous and the controls that can be implemented. Understanding the water quality conditions within the watershed will be invaluable in determining appropriate structural and nonstructural pollutant control practices.



The 2011 Total Maximum Daily Load (TMDL) implementation plan for *E. coli* by the City of Boulder in accordance with Section 303(d) of the federal Clean Water Act in 2011 (which covers the Boulder Creek Stream segment known as 2b and runs from 13th Street to the confluence with South Boulder Creek) continues to provide the other Partners with tools to control *E. coli* sources in their communities, as will the watershed monitoring trending analysis.

2015 Highlights

In 2015, all Partners achieved compliance with their stormwater discharge permits. A summary of the major tasks completed in 2015 follows.

Costs

The KICP programs emphasize cost-effectiveness by sharing programs and using common strategies and leveraging existing programs. The 2014 KICP budget was \$456,302, of which \$107,296 (24%) was proportionately reimbursed to each of the Partners.

School and Community Outreach Programs

KICP contracted with the City of Boulder's Watershed Education Program to implement community outreach and school education programs in St. Vrain Valley School District (SVVSD) and Boulder Valley School District (BVSD). The program continued to reach out to schools and the residential community through school programs, stream teams, speakers programs, pledge programs, and promotional material distribution. See Appendix A for a full report.

KICP implemented the annual mini campaign, *Green is the New Pink*, which brought awareness and engaged KICP residents to take action to reduce stormwater pollution from fertilizer application. KICP was successful at reaching the attendees of events in the KICP communities, Master Gardeners, and Front Range bus ridership and magazine readers through messages and images.

92 residents participated in stream teams and collected **64** bags of trash
2,697 students and **114** classrooms/events participated in school-based education programs
3,500 door hangers were distributed by the Boulder County Youth Corps
1,332 residents visited stormwater booths at **7** community events
1,210 students from BVSD and SVVSD schools attended the joint Water Festival
13,427 general KICP and campaign materials were distributed
665 residents attended 1 of **17** speaker events
376 families and individuals took the water protection pledge
765 individuals received the biannual newsletter
5,073 visited the KICP website, www.KeepitCleanPartnership.org
79 tributary signs are posted at stream crossings



Business and Municipal Outreach Programs

KICP contracted with BCPH's Business Environmental Sustainability Team (BEST), specifically the Partners for a Clean Environment (PACE) Program, to implement business and municipal outreach. See Appendix B for a full report.



134 restaurants, vehicle service, and retail establishments were visited
36 contract service providers were visited
13 property managers were visited
181 windshield surveys were conducted
12 municipal facilities were visited
140 municipal employees were trained
305 municipal employees received the newsletter
12 municipal stormwater heroes were recognized
1 newsletter was mailed to **305** municipal employees

Business Outreach

PACE implemented the cascading business outreach strategy that included evaluating best management practices (BMPs) specific to the business sector that are protective of stormwater quality, meeting one-on-one with businesses to advise them on the BMPs, instructing businesses on how to implement the BMPs, sharing the experiences of similar businesses, and developing and distributing educational materials.

In 2015, BEST fully implemented – for the second year – a strategy with property owners/managers to share information on the behavior of their tenants and seek their support in ensuring that BMPs are implemented. Property owners and managers received an evaluation on the stormwater practices of their tenant businesses and the contractors they hired to maintain or clean their properties. This information has successfully motivated property owners and managers to better understand and take greater responsibility for the activities underway in their tenant-occupied properties, as well as the properties they occupy themselves.

Municipal Outreach

In 2015, BEST continued providing compliance advice and support to KICP municipal staff by conducting municipal site visits and trainings for employees in each KICP community. Effort was spent to evaluate municipal performance within five behavior areas (*Spills and Leaks, Outdoor Material Storage and Handling, Good Housekeeping, Outdoor Washing, and Application of Chemicals*) and identify barriers that can help the Partners understand and address them. Training messages were updated to include and focus on the five behavior areas needing improvement, as identified in 2013 and 2014.

Construction Trainings

KICP hosted trainings with several instructors to provide both municipal and private inspectors and contractors with information necessary to implement effective active and post-construction programs.



- 30** participants received erosion control in waterways training
- 48** participants received construction erosion control training
- 24** participants received post-construction inspection and maintenance training
- 25** participants received training on low impact/green infrastructure practices

KEEP IT CLEAN



**2015 MCM 1&2
ANNUAL REPORT**

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MCM 1 & 2- PUBLIC EDUCATION & OUTREACH

History

To address the impact of stormwater on water quality, the U.S. Environmental Protection Agency (EPA) issued the Phase I and II Stormwater Rules (expansion of the Clean Water Act) which require National Pollutant Discharge Elimination System (NPDES) permits for operators of municipal separate storm sewer systems (MS4s) serving populations both over and under 100,000 and runoff associated with industry, including construction sites one acre and larger.

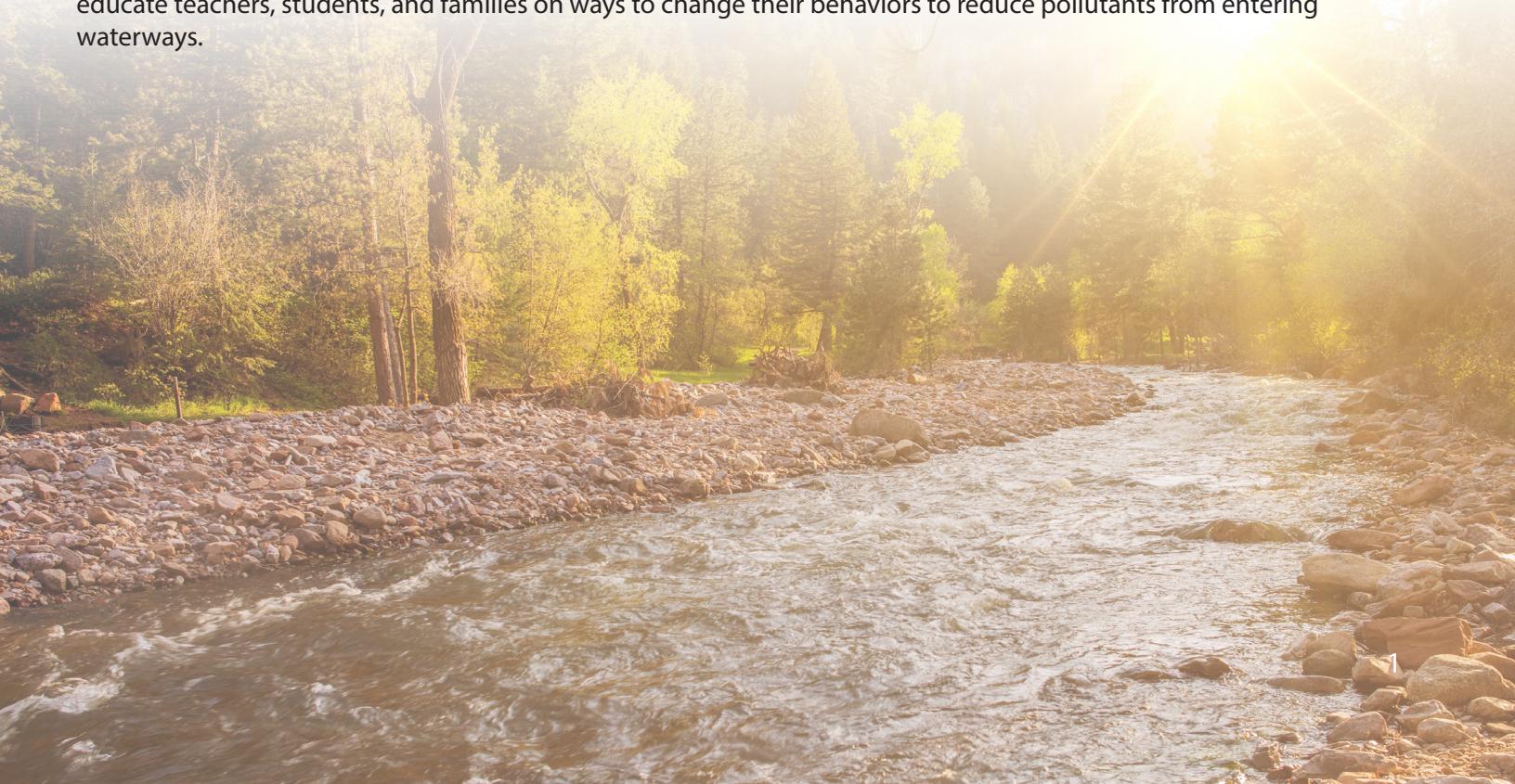
2008 – 2013 Permit Requirements

Municipal stormwater regulations call for the implementation of six minimum control measures (MCMs) to address the impact of stormwater runoff on water quality and stream health. MCM 1 & 2 requires the permittee must implement a public education and outreach program in an effort to promote community engagement and behavior change by the public to reduce water quality impacts associated with pollutants in stormwater runoff and illicit discharges. Activities include:

- Target specific pollutants and pollutant sources that may impact water quality.
- Provide outreach activities that educate the public the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.
- Inform businesses and the general public of their city's stormwater rules to reduce illegal discharges and improper disposal of waste.

Program Implementation

The Keep It Clean Partnership (KICP) grew out of the need for local communities to respond to these stormwater regulations. Formed in 2002, the KICP communities include Boulder, Longmont, Lafayette, Boulder County, Louisville, Erie and Superior. KICP contracts with the City of Boulder to implement activities required under MCM 1 and MCM 2 for all KICP communities. The KICP conducts school-based education and community-based outreach programs to educate teachers, students, and families on ways to change their behaviors to reduce pollutants from entering waterways.



EDUCATION PROGRAM

Each year, a minimum of 60 classroom and/or field-based programs are offered to Boulder Valley School District (BVSD) and St. Vrain Valley School District (SVVSD) teachers and students.

PARTNER COMMUNITY	KICP GOAL	COMPLETED PROGRAMS	# OF CONTACTS
Boulder	35	35	659
Longmont	31	33	803
Lafayette	7	16	356
Boulder County	6	7	171
Louisville	5	5	139
Erie	5	6	107
Superior	4	4	462
KICP TOTAL	93	106	2697

SPEAKERS PROGRAM

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

PARTNER COMMUNITY	KICP GOAL	COMPLETED PROGRAMS	# OF CONTACTS
Boulder	3	3	138
Longmont	3	3	161
Lafayette	2	2	109
Boulder County	2	3	140
Louisville	2	2	48
Erie	2	2	39
Superior	2	2	30
KICP TOTAL	16	17	665

OUTREACH BOOTH

A staffed booth travels to at least one special event in each of the KICP communities to provide stormwater pollution prevention materials to the public as well as receive program feedback and suggestions.

PARTNER COMMUNITY	EVENT	# OF CONTACTS
Boulder	Doggie Dash	85
Longmont	Rhythm on the River	400
Lafayette	Lafayette Public Safety Day	129
Boulder County	IBM Take Your Kid to Work Day	85
Louisville	Taste of Louisville	273
Erie	Great Erie Outdoor Adventure	190
Superior	Superior Chili Fest	170
KICP TOTAL		1332

COMMUNITY PARTNERSHIP

1,736 BVSD students received the "Rain, Rain" stormwater pollution prevention program by Thorne Nature Experience education specialists. See page five for more details.

TEACHER LED PROGRAMS

208 students learned about stormwater messaging by SVVSD teachers versed in KICP education programs.

NEWSLETTER

765 contacts have received the KICP biannual newsletter, distributed each spring and fall.

BOULDER COUNTY YOUTH CORPS

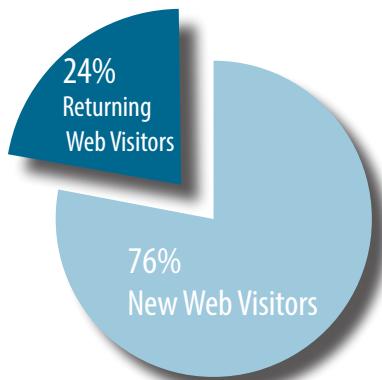
30 bags of trash were collected and 3,500 mini-campaign door hangers were distributed throughout KICP communities by five dedicated team members.

PLEDGES

2,070 pledge actions were recorded from KICP pledges distributed at education programs, outreach booths and the water festival.

KICP WEBSITE

5,073 people visited the KICP website in 2015. 76% of these visitors are new. Staff link Facebook blogs to the website each month to help increase the number of web visitors.



STREAM TEAMS

Staff support volunteers in each KICP community to pursue water protection activities by providing resources and training for creek cleanups, water quality monitoring and more.

PARTNER COMMUNITY	KICP GOAL	PROGRAMS	BAGS OF TRASH
Boulder	2	2	10
Longmont	2	2	5.5
Lafayette	2	2	5.25
Boulder County	2	2	6
Louisville	1	2	8
Erie	1	1	3
Superior	1	3	26.5
KICP TOTAL	11	14	64.25

MATERIAL DISTRIBUTION

Brochures, fact sheets, and product giveaways 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 school-based education programs and within public municipal areas.

PARTNER COMMUNITY	PIECES OF COLLATERAL
Boulder	7701
Longmont	3037
Lafayette	730
Boulder County	642
Louisville	642
Erie	537
Superior	138
KICP TOTAL	13427

TRIBUTARY SIGNS

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

PARTNER COMMUNITY	# OF SIGNS INSTALLED
Boulder	44
Longmont	9
Boulder County	6
Louisville	8
Erie	6
Superior	6
KICP TOTAL	79





1,210 Water Festival Students

The Boulder and Longmont water festival's combined for the 23rd annual water festival. In total, 515 SVVSD and 695 BVSD fifth grade students attended the event. All classes attending the water festival participated in the pre-festival water festival activities which include home and teacher-led assignments focused on water awareness, conservation, stormwater pollution prevention and flooding.

BUILDING PARTNERSHIPS

KICP partners with prominent community organizations to reach a broader audience with stormwater messaging without having to increase resources.



KICP staff trains Thorne Nature Experience staff to run the "Rain, Rain" enviroscape program. This train the trainer partnership results in more than 50 Boulder County classes receiving the program through Thorne Nature Experience.



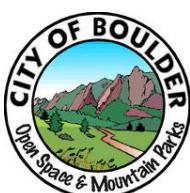
The Center for Resource Conservation educates approximately 200 municipal customers the importance of stormwater pollution prevention and water conservation through their Water Wise Landscape Seminar Series and Slow the Flow program.



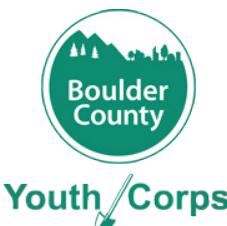
Colorado State University Extension's Master Gardner Program spreads stormwater messaging to approximately 500 individuals at their workshops, clinic sites and social media activities.



The University of Colorado, Boulder provides discounted space and event coordination support for the water festival and encourages college level classes to learn stormwater messaging.



Open Space and Mountain Parks educates more than 1,000 county-wide participants on the KICP message in their Voice and Sight Program. In these classes, OSMP distributed approximately 100 Doo Good dog bag dispensers.



The Boulder County Youth Corps helps support our mission by organizing stream teams and distributing materials with KICP stormwater messaging.



Longmont Humane Society shared the stormwater messages through their newsletter and other social media outlets.



Boulder Valley Humane Society incorporated the stormwater message through their volunteer trainings, new pet owner package and annual event activities.

ANNUAL CAMPAIGNS

KICP mini-campaigns aim to raise public awareness by focusing on a target pollutant. The 2014 dog waste campaign continued while adding the 2015 nutrient campaign.

2014 CAMPAIGN: DOG WASTE

Doo Good

Pick up dog doo. Protect streams.

Dog doo is more than a nuisance!

IT SPREADS DISEASE
Dog waste carries parasites and bacteria like Giardia and E. coli which can be as much as **20%** of the pollution in public waterways.

IT HURTS FISH
Nutrients in dog waste act like a fertilizer in streams making algae grow and reducing oxygen levels.

IT ADDS UP!
Locally there are **90,000** dogs that make **11,700** tons of poop a year.



Staff determined dispensers were the most popular and effective tool for educating customers and continue to be distributed throughout the year as part of the 2015 campaign legacy.

REGULATION 85

The 2015 nutrient campaign helps meet requirements for Regulation 85, the Nutrients Management Control Regulation. This regulation requires MS4 permittees develop, document and implement a public education program to reduce water quality impacts associated with nitrogen and phosphorus.

2015 CAMPAIGN: NUTRIENTS

Green Is The New PiNK

Go easy on the fertilizer!

Phosphorus, Nitrogen and Potassium (P-N-K) from fertilizers pollute streams.

IT HARMS STREAMS
Excess nutrients in streams, like phosphorus and nitrogen, increases algae growth which can hurt fish and lead to dead zones.

IT RUNS OFF
Just like rain and snowmelt, overwatering can wash nutrients off of yards and into storm drains which lead directly to creeks!

IT ADDS UP
Up to **60%** of nitrogen that people put on their lawns through fertilizer ends up in our local creeks!

www.KeepItClean.org

In 2015, staff distributed a variety of materials but found the large seed fact sheet, rain gauge and small watering can to be the most effective materials because customers were more likely to use them and learn the stormwater message.

2015 CAMPAIGN SUCCESS

Marketing Efforts

- 1 Full Page Chinook Book Ad
- 2 Full Page Colorado Gardener Ads
- 1 Utility Bill Insert

RTD Ad Partnership

- 8 Counties
- 1,071 Bus Interiors
- 104,932,002 Annual Boardings

Colorado State University Extension Partnership

- 55 PiNK Ambassadors
- 106 Attendees at CSU Events
- 320 Pieces of Material Distributed

Materials Distributed

- 3,500 Door Hangers
- 683 Fact Sheets
- 199 Watering Cans
- 132 Kneeling Pads
- 98 Seed Bomb Bags
- 50 Rain Gauges



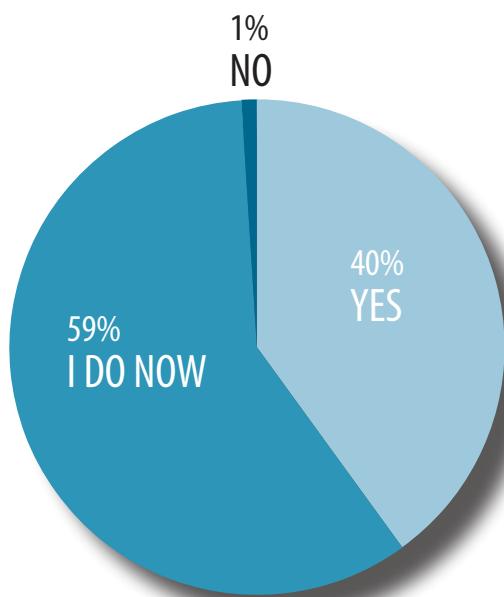
DOO GOOD LEGACY

- 4,276 Open Space Mountain Parks Dog Class Recipients
- 23,000 Chinook Book Ad Recipients
- 6,000 Boulder Valley Humane Society Ad Recipients
- 5,000 Longmont Humane Society E-mail Blast Recipients

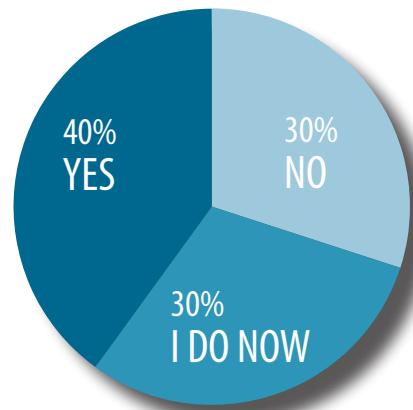
CAPTURING METRICS

KICP staff implements specially designed mini- campaign surveys to determine the effectiveness of programs while at the same time, educating participants. Surveys are distributed through several KICP outreach efforts including education programs, outreach booths, speakers programs and online media.

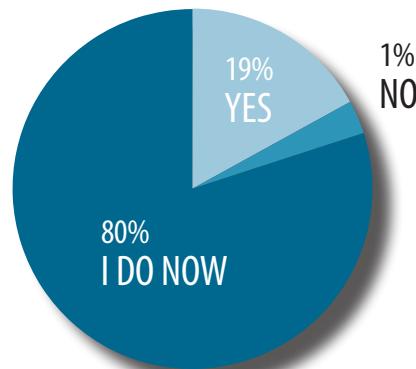
Educational Survey Results



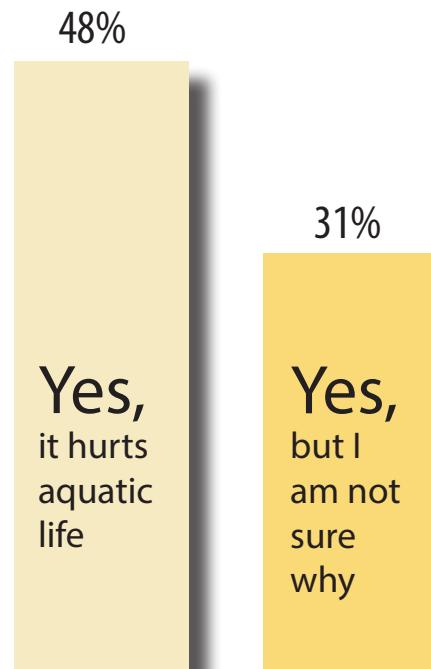
Did you know storm drains lead to creeks without the water being treated?



Did you know a lawn soil test can tell you if fertilizers/nutrients are needed?



In your opinion, are nutrients, like phosphorous, nitrogen and potassium (PNK) from humans an important water quality concern?



Did you know excess nutrients from lawn fertilizer runoff into our waterways which can increase algae growth and decrease oxygen available for fish?

**Education Programs
KICP WEBSITE
1,554 RETURNED SURVEYS
Outreach Booths
Speakers Programs**



Keep it clean 'cause we're all downstream

2015

Annual Report

MCM 3 & MCM 6 Education, Advising,
Compliance Assistance and Behavior
Evaluation.

Keep It Clean Partnership and Partners for a Clean Environment



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Boulder County Public Health (BCPH) provides Keep it Clean Partnership (KICP) communities with education, one-on-one advising, and compliance assistance and evaluation through its Business Environmental Sustainability Team (BEST) and Partners for a Clean Environment (PACE) Program. BEST and PACE provide these services to KICP for both commercial business (in support of Minimum Control Measure [MCM] 3 Illicit Discharge and Detection) and municipalities (in support of MCM 6 Good Housekeeping and Pollution Prevention for Municipal Operations).

MCM 3 - Illicit Discharge Detection and Elimination

BEST has been providing outreach and technical assistance to businesses for 20 years and focusing on stormwater (in partnership with the KICP) for 10 years. This has included developing business sector-specific best management practices (BMPs) protective of stormwater quality, meeting one-on-one with businesses to advise them on these BMPs and instruct them on how to implement them, sharing the experiences of similar businesses to demonstrate that these practices are achievable, and developing and distributing educational materials. The strategies outlined below demonstrate an evolution of services based on these experiences and the relationships BEST has built over the years. The strategies will support the KICP in meeting its goals and objectives outlined above. The strategies are built on following these key practices:

- One-on-one advising services for business properties, property owners and managers, and contracted service providers in key sectors identified as having the greatest potential to impact stormwater quality.
- Leveraging success and existing resources and infrastructure developed by Boulder County Public Health through the PACE Program.
- Communicating actively with KICP communities.
- Evaluating performance through five BMP behavior areas: 1) spills or leaks, 2) outdoor materials storage and handling, 3) good housekeeping, 4) outdoor washing and cleaning, and 5) additional criteria

Property Owners and Managers Advising

The property owners and managers targeted in 2015 were identified by a combination of windshield surveys at tenant businesses that indicated issues at particular properties, business advising services where property owners/managers were identified as a barrier to maintaining stormwater BMPs, large ownership or management areas within a community, and/or property owners/managers identified by KICP Partners as a priority.

Partner	Property Owners and Managers Advised
Boulder	4
Lafayette	2
Boulder County	2
Louisville	2
Erie	2
Superior	1
Total	13 (13 contracted)

BEST advisors identified both stormwater best practices being implemented, as well as barriers to best practices that were not being implemented.

This property owner and manager outreach was very successful in 2015; 13 property owners and managers were advised. Many said they'd use the information in the report as leverage with contractors or tenants. The majority of property owners/managers were interested, receptive, and grateful for the report.

Business Advising

Research indicates that one-on-one contact is the most likely to produce behavior change and promote social norming - a process by which businesses measure their actions against their peers.¹ BEST has seen the success of this approach with businesses over the last 20 years. It also notes the success of this strategy in its evaluation of advising services and behavior performance. In 2003, BEST developed and introduced business stormwater BMPs and began educating businesses on these behaviors during one-on-one advising services. Advisors focused on businesses in sectors with the greatest potential to impact stormwater quality. Depending upon the situation, advisors provide one or all of the following services:

- Assessment of performance and compliance with BMPs, identifying opportunities for improvement.
- Compliance assistance by referring the business to pertinent local codes.
- Behavior change counseling and work with businesses to identify alternative approaches.
- Technical assistance such as researching technical questions or new technologies.
- Reduction of barriers to implementation, such as contacting property owners, managers, and vendors.
- Maintenance and provision of information about contractors and vendors.

In 2015, BEST advisors provided advising services to 134 businesses across Boulder County, focusing on those with the greatest potential to impact stormwater quality through their business practices:

- **Restaurants.** Advising to the restaurant sector continues to be important due to high turnover of staff and management and new businesses. Threatened and active discharges from restaurants have been a significant percentage of the issues identified by BEST/PACE over the last 10 years.
- **Fixed Facility.** This sector includes retail stores, including pet stores, convenience stores, gas stations, home improvement centers, thrift stores, car sales, garden centers, hospitals, schools, grocery stores, small manufacturers, and warehouses. This sector also includes industries that are not required to have individual permits but may use products that can pollute local waterways; they were identified as priorities by the KICP Steering Committee in 2012.

¹ Dr. Doug McKenzie-Mohr, "Community-Based Social Marketing," <http://www.cbsm.com/pages/guide/preface/>.

- **Auto Service.** This sector includes auto repair and auto body. Auto repair facilities seem to have consistent ownership/management and thus require less frequent advising; however, auto facilities also have many opportunities to significantly impact water quality.

Businesses Advised in 2015

Partner	# Business Advised	# Contract
Boulder	68	65
Lafayette	18	16
Boulder County	16	16
Louisville	12	12
Erie	13	12
Superior	7	7
Total	134	128

In 2015, the BEST-PACE team exceeded the contract goals by providing advising services to 134 versus 128 contracted businesses.

Evaluation is an important and necessary tool to ensure interventions are effective. With its data management system, BEST has developed an evaluation methodology that focuses on the implementation of BMPs, as exhibited by five behavior areas in the business sectors that have been identified as having the greatest potential to impact stormwater quality. Behavior in each of these five areas is a direct indication of whether a business is able to meet and maintain compliance with the BMPs identified to protect stormwater quality.

In 2012, after nine years of providing one-on-one assistance to target businesses based on their potential to impact stormwater, PACE/BEST determined that 68% of the behaviors evaluated meet the BMP performance target in three key sectors (restaurant, retail, and auto).

5 Behavior Areas

- ✓ **Spills or leaks:** Prevention of leaks or spills from vehicles, equipment, gas, oil, hydraulic fluid, or other chemicals.
- ✓ **Outdoor materials storage and handling:** Cover and containment of hazardous liquids, containers, drums, batteries, or other dry materials. Proper storage of containers, dirt piles, debris, trash, mag chloride, salt/sand, chemicals, oil, diesel, gasoline, or other products.
- ✓ **Good housekeeping:** Covering of trash dumpsters, sweeping debris, and on-site BMP maintenance.
- ✓ **Outdoor washing and cleaning:** Washing of vehicles, sidewalks, and buildings; pressure washing.
- ✓ **Additional criteria:** Proper application of pesticides, fertilizers, salt, liquid deicer, paint, or chemical products; proper discharge of wastewater; proper scheduling of maintenance activities; and proper recordkeeping (BMPs/SOPs).

Compliance Ratings

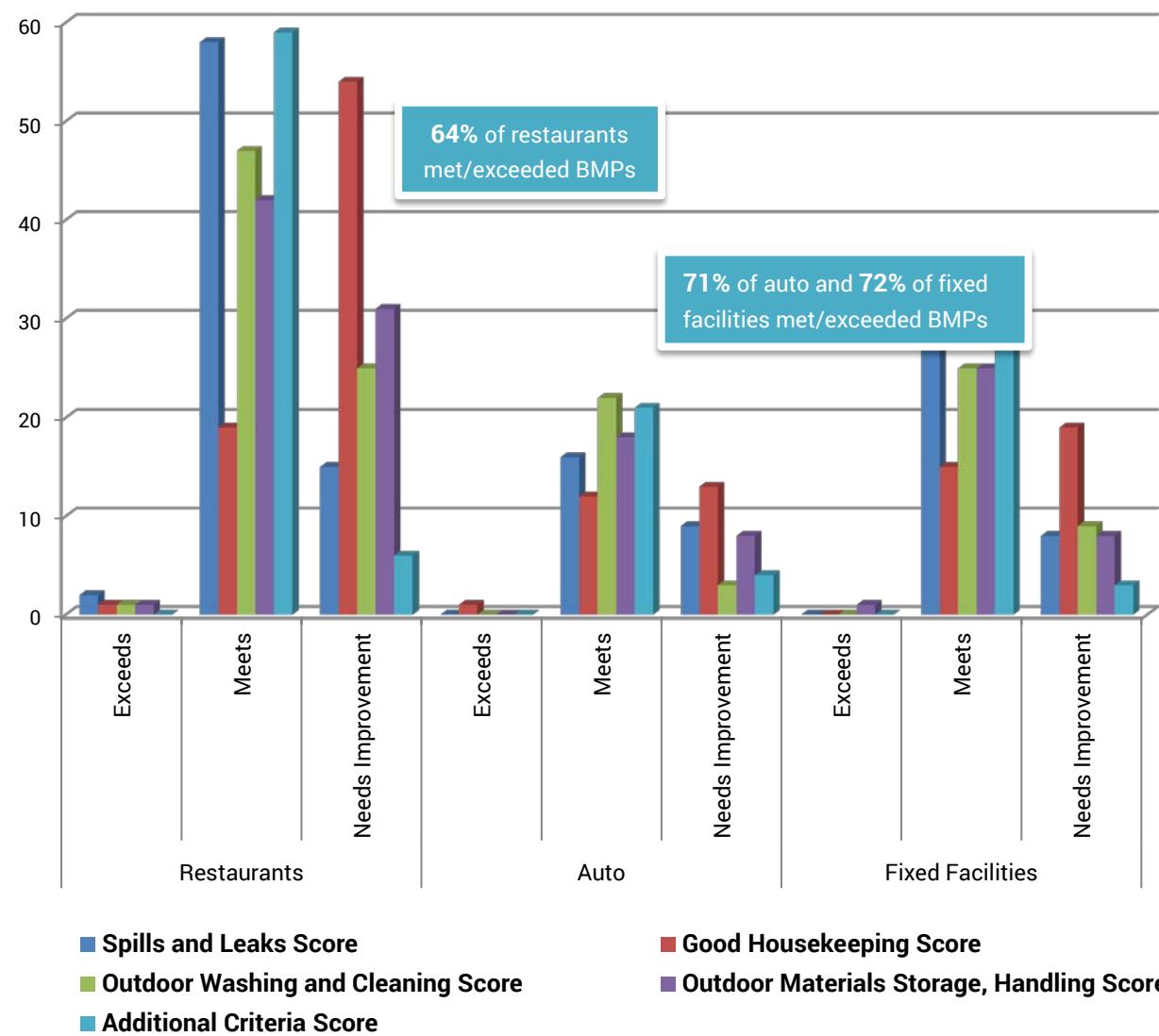
RATING	DEFINITION
Exceeds	Facility shows ownership of protecting water quality and measures above and beyond what is required (e.g. making signs to remind employees and haulers to keep the lids closed).
Meets	Facility is in compliance (i.e. implementing appropriate BMPs) with all specific behaviors in the behavior areas. If they are not meeting one specific behavior, the entire area is considered as "Needs Improvement."
Needs Improvement	One or more specific criteria within the behavior areas is not in compliance (e.g. not implementing appropriate BMP's or not having a spill kit).

Analyzing the results of the 134 businesses that received advising services in 2015 provides a snapshot for the BMP behavior evaluation. 2015 observations include:

- 64% (47) restaurants met/exceeded BMPs
- 36% (26) of restaurants needed improvements
 - Good housekeeping, outdoor materials storage, and outdoor washing were the most prevalent BMPs observed needing improvement
 - High turnover in businesses and employees
- 71% of automotive and 72% of fixed facilities met/exceeded BMPs

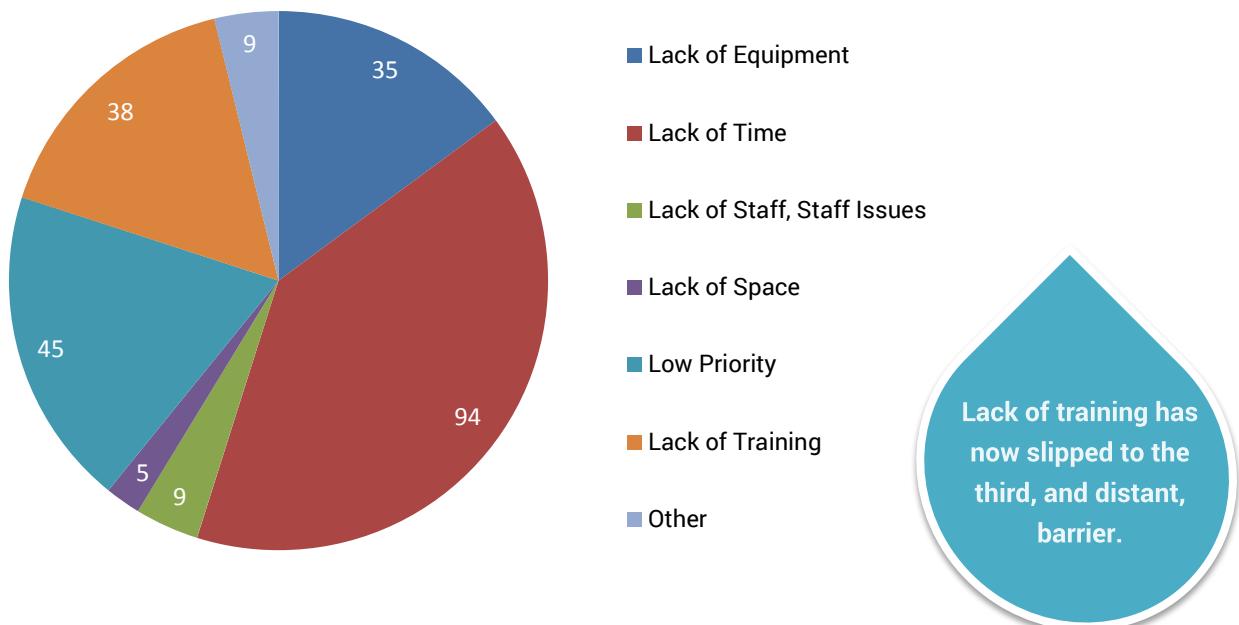


MCM 3 Business Behavior Evaluation Findings – 2015



As indicated by businesses, the barriers to meeting these BMPs have been fairly consistent since 2012. Lack of training and lack of time have been two of the most prevalent barriers identified. Lack of equipment was identified as one of the top three barriers in 2012; however, that barrier has not been in the top three barriers since then. In 2013 and 2014, lack of time displaced lack of training as the top barrier identified. In 2015, lack of training (16%) slipped to the third, and distant, barrier behind lack of time (40%) and low priority (19%). This data supports the 2016 strategy to reduce advising /training services and instead allow cities to focus on enforcement.

MCM 3 Business -Barriers to Compliance - 2015

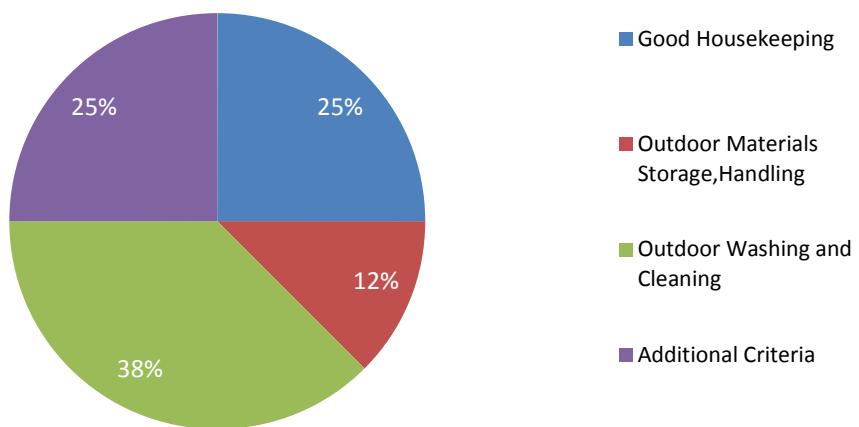


Contracted Service Providers

BEST provides training and one-on-one advising services for contracted service providers. Contracted service providers operate under contract at business facilities to perform a service. The impact of their work is regional in nature. Service providers targeted in this program include landscapers, storm drainage maintenance contractors, pressure washers, hood cleaners, carpet cleaners, grease haulers, lawn care, painters, welders, concrete workers, window washing, and utility companies. In this strategy, one-on-one advising is provided to these service providers to mitigate threatened and active discharges resulting from their activities (e.g., grass clippings being blown in the street, pressure washing water entering a storm drain), as well as identify instances in which the desired behaviors are not being implemented. In alternate years, contracted service providers are invited to participate in a training which provides a group learning experience and an opportunity to share approaches and address misconceptions or concerns.

In 2015, 36 contracted service providers were contacted. Among those contacted, Outdoor Washing (38%), Good Housekeeping (25%), and Additional Criteria (25%) were the behavior areas most identified as needing improvement.

Behaviors that Needed Improvement -Contracted Service Providers - 2015



Outdoor Event Coordinators

Outdoor events have the potential to impact water quality, especially when food vendors attend. This strategy provides one-on-one advising services to municipal and private entity event coordinators that manage large events. Event coordinators were identified using the list of annual events developed by the BCPH Food Safety Program and prioritized by highest number of vendors participating in the event or by communities that have not already received outreach in this area. Educational resources are provided for distribution to vendors attending the event. The strategy calls for BEST to evaluate performance in the five behaviors at two events per year to identify stormwater practices being implemented and areas that may need improvement. Additionally, BEST coordinates with the BCPH Food Safety Program to include stormwater information in packets distributed to event coordinators and to train Food Safety Team members to recognize and report illicit discharges.



In 2015, BEST advised event coordinators for the following events:

- City of Boulder Events, including coordinators from the City Manager's Office, Parks and Recreation Special Events, Finance Department-Liquor Permits for Special Events
- Louisville Fall Festival

BEST developed a *PowerPoint* presentation for special events showing examples of past discharges from City of Boulder events and providing information about general stormwater issues. BEST also provided training to the BCPH Food Safety Team about the KICP partners' stormwater ordinances, identifying stormwater issues, proper reporting procedures for active discharges, and the stormwater BMPs for event coordinators and vendors.

Windshield Surveys

The goal of windshield surveys is to leverage advising being provided through other BEST services to businesses in the KICP communities by observing stormwater performance either by driving by, walking around businesses, or observing operations in the field. This approach maximizes the efficient use of KICP funding by adding 4-5 more trained specialists in the communities who can assist with identifying threatened and active discharges and facilities that would benefit from BEST's one-on-one advising service. KICP Partners are immediately notified if an active discharge is observed. In 2015, BEST conducted 115% of the contracted windshield surveys; 4 active and 52 threatened discharges were identified.

2015 Windshield Surveys

Partner	Surveys Completed	Contract #	Threatened Discharges	Active Discharges
Boulder	110	100	25	3
Lafayette	18	15	2	0
Boulder County (including Niwot)	18	15	10	1
Louisville	12	10	8	0
Erie	10	10	5	0
Superior	13	7	2	0
Total	181	157	52	4

MCM 6 – Good Housekeeping and Pollution Prevention for Municipal Operations

BEST provides municipal education and compliance evaluation through the Boulder County Public Health (BCPH) Business Environmental Sustainability Team (BEST), and Partners for a Clean Environment (PACE) Program. BEST/PAGE provides a stormwater pollution prevention program to KICP Partners' municipal facilities through an inspection and compliance certification program. Compliance is based on criteria developed specifically for the facility through industry standards and municipal staff recommendations. Facilities are targeted based on their potential to impact water quality. BEST/PAGE conducts audits of municipal operations to ensure that procedures are being implemented that meet the compliance criteria and accepted best management practices. BEST/PAGE notifies the facility or operations manager, as well as the KICP Partner's stormwater manager, if any deficiencies are noted during site visits. BEST/PAGE provides yearly and as-requested training to KICP Partner staff on implementing BMPs to prevent stormwater pollution and on preventing, observing, and reporting illicit discharges. This training is provided to field personnel in classroom and/or customized field or operations training sessions.

The BEST/PAGE team has been providing outreach to the municipal community for ten years. Initially, BEST inventoried all municipal operations and facilities and developed 25 stormwater best management practices (BMPs) with input from focus groups. In 2015, BEST provided municipal site visits, evaluation of site performance using the five behavior areas indicative of BMP performance, training to municipal employees, and employee recognition programs.

Municipal Site Visits

Municipal site visits involve walking around the facility and performing an evaluation of the five behavior areas and stormwater BMPs; documenting non-compliance issues; taking photographs (later used for training staff); sending follow-up letters or e-mails with photos and information on areas for improvement, proper BMPs, and overall compliance with stormwater regulations. BEST evaluated the top five stormwater behavior areas (per type of operation) and rated each facility on whether they met, exceeded, or needed improvement in each, using the same behaviors and ratings as those used in MCM3. Ratings for compliance with the desirable behaviors were tracked, as well as barriers to compliance for each behavior area. In 2015, 12 site visits were conducted at municipal facilities in the KICP communities.

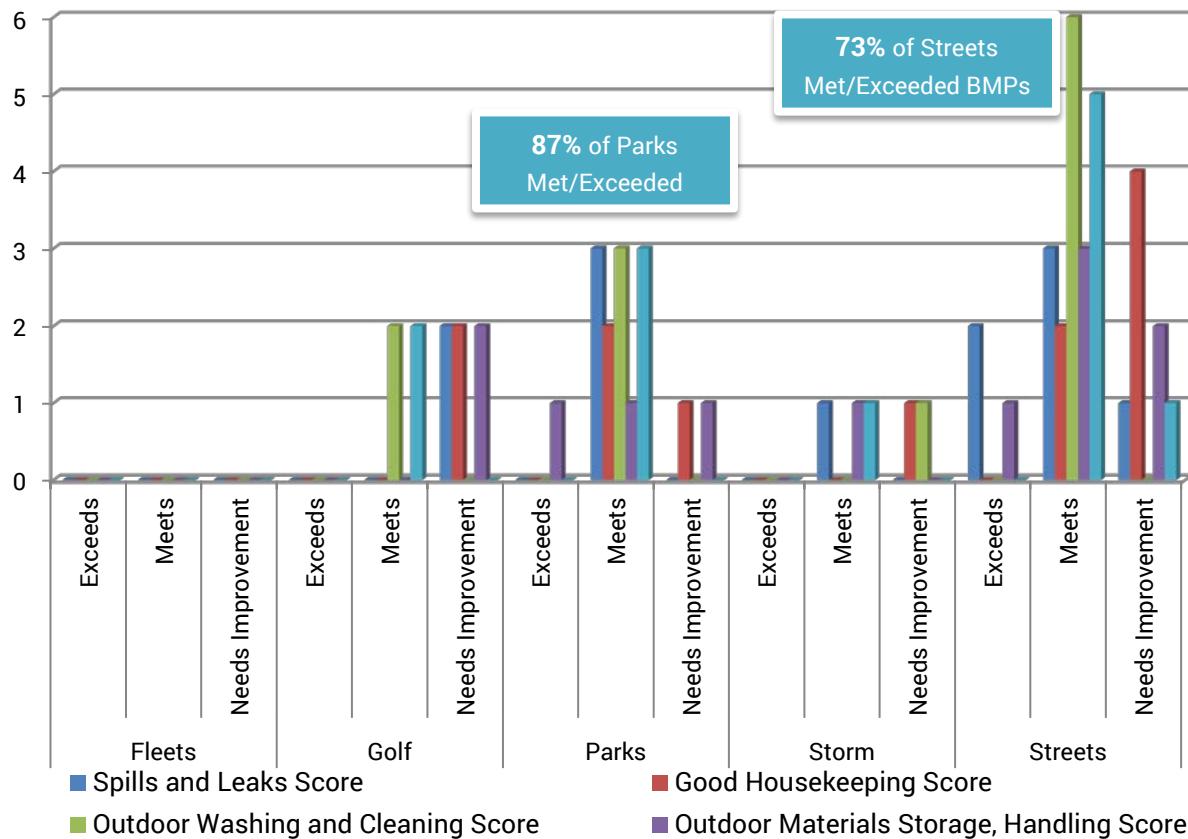
Partner	Site Visits	Contract #
Boulder	0*	7*
Lafayette	3	3
Boulder County	3	3
Louisville	2	3
Erie	2	2
Superior	2	1
Total	12	19

*The City of Boulder opted for a "Historical Stormwater Performance Report" of all their facilities in lieu of 7 site visits by BEST/PAGE.

Municipal Facilities Behavior Evaluation

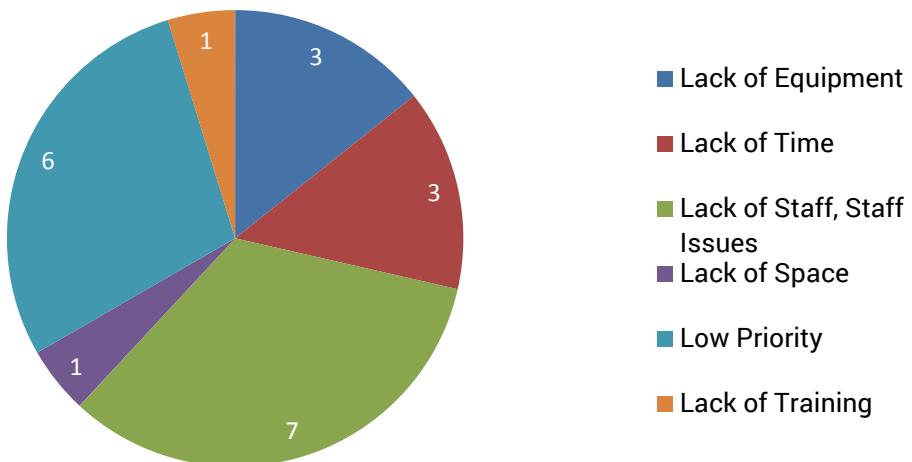
In 2012, after 9 years of providing one-on-one assistance to municipal facilities based on the potential of these facilities' practices to impact stormwater, and using a representative sample, it was determined that 68% of the behaviors evaluated met the BMP performance target. Analyzing the results of the 12 facilities that received advising services in 2015 provides a snapshot for the BMP behavior evaluation.

MCM 6 Municipal Facilities Behavior Evaluation Findings - 2015



Note about the 2015 MCM 6 Behavior Evaluation: Only 12 site visits were conducted in 2015, versus 46 in 2014. Due to the small sample size, the evaluation does not appropriately represent behavior in the sector overall. In addition, no fleet maintenance shops were visited due to the total program decrease in visits and because fleets shops are generally located together with street maintenance shops.

MCM 6 Municipal Facilities - Barriers to Compliance - 2015



Feedback from facilities about barriers to meeting these BMPs has been fairly consistent since 2012; lack of staff and low priority have been two of the most prevalent barriers identified. Lack of equipment was identified as one of the top three barriers in 2012, 2013, 2014 and 2015. Lack of time was also identified as a top three barrier in 2014 and 2015 (it was tied with lack of equipment for third).

Municipal Employee Stormwater Training Program

BEST provides yearly and as-requested training to municipal staff on operational stormwater BMPs and on observing and reporting illicit discharges. This training is provided to field personnel during general classroom training and/or customized in-the-field or operations specific training sessions.

Municipal Stormwater Trainings

BEST provides several types of municipal stormwater trainings in both a classroom and field setting.

Training	Audience / Description
Stormwater 101 for Tier 1 Operations	Fleet, Park, Golf Course, Street, and Storm Drain Maintenance Departments
Stormwater 102 for Tier 2 Operations	Municipal Fire Departments, Municipal Buildings, Water and Wastewater Treatment Facilities, and Facilities Maintenance Departments
Customized Operations-Specific	Proper application of pesticides, chemicals, paints, or fertilizers; proper BMPs to prevent stormwater pollution; Integrated Pest Management (IPM) procedures; spill cleanup procedures; good housekeeping; vehicle or outdoor washing; materials storage and handling; and/or proper disposal of wastewater or waste materials

Customized Field

BEST/Stormwater advisor meets with municipal employees in the field to observe routine maintenance operations and to provide guidance on stormwater pollution prevention outside of a classroom setting. This ensures that the training is relevant and meaningful to day-to-day operations.

Stormwater 101 and 102 trainings provide basic information about stormwater compliance, illicit discharge identification and reporting, local contact information, and best management practices to prevent stormwater pollution. The *Stormwater 101* and *Stormwater 102* presentations can be found at <http://pacepartners.com/index.php/municipal-stormwater-operations>.

In 2015, 6 training classes were provided to 140 employees. While most of the trainings were tailored to the community in which the training was conducted, BEST-PACE also conducted a regional Stormwater 101 for Tier 2 Operations training that was open to all county and municipal employees in the KICP communities.

Partner	Employees Trained
Regional	11
Lafayette	42
Boulder County	42
Louisville	15
Erie	23
Superior	7
Total	140

Employee Recognition Programs

Stormwater Heroes Program

An employee recognition program provides a positive incentive for municipal employees to implement BMPs to prevent stormwater pollution and to report illicit discharges. The goal of the *Stormwater Heroes* program is to increase municipal staff's knowledge and awareness of stormwater pollution prevention and encourage employees to participate in water protection behaviors. The program is also intended to empower staff to protect local water quality and to recognize that the work they do directly affects water quality. Stormwater Heroes are nominated by coworkers, managers, or themselves by notifying BEST staff of their actions. They are recognized with a brief story in the *Stormwater Newsletter*, and gift certificates were awarded from a random drawing of all heroes. BEST also distributed awards (e.g. stickers, water bottles, names in newsletters, and/or gift certificates) to employees who protected storm drains, implemented BMPs to prevent stormwater pollution, or reported illegal discharges. Employees are recognized in the *Stormwater Newsletter* and during training sessions.



- 12** Stormwater Heroes recognized in the annual Stormwater Newsletter
- 2** Stormwater Heroes awarded \$25 gift certificates in random drawing
- 7** Training attendees awarded \$15 gift certificates for taking KICP Pledge

Keep It Clean Pledge Program

The Keep It Clean Pledge Program was developed to create ownership and to motivate municipal employees to take actions to protect storm drains. Employees were asked during stormwater training sessions to pledge to "Keep It Clean" - a community-based social marketing technique aimed at changing employee behavior. They receive a printed pledge form to remind them of their pledge and a water bottle or travel mug as a prompt. BEST staff keeps a record of pledges. Incentives, such as gift certificates, stickers, water bottles, and mugs, are distributed during Stormwater 101 or 102 trainings, custom trainings, or educational events.

Keep It Clean Pledge Actions

- ✓ Locate and protect storm drains near work site.
- ✓ Cover and contain any materials stored outside and clean up spills.
- ✓ Report any pollutants that may enter storm drains.

139 employees signed the pledge!

In 2015:

- 20 *Protect Storm Drains* stickers were distributed during trainings and site visits.
- 33 *Keep It Clean* static-cling window decals were distributed during trainings and site visits.
- 130 *Keep It Clean* water bottles were distributed during training classes.
- 139 employees signed the *Keep It Clean Pledge* to reduce stormwater pollution.

Stormwater Newsletter

Annual newsletters include articles of interest; seasonal messages; and recognition of Stormwater Heroes, Best Stormwater BMPs, Most Improved BMPs or Facility, and Illegal Discharge of the Year. In 2015, PACE designed and distributed the *Winter Stormwater* issue to 305 employees. Nearly 100 employees (31%) opened the email, and 12 clicked on the hyperlinks within the newsletter. Note: evaluation data may not be accurate because the newsletter can be read in its entirety without the email being opened.