



City of Cañon City

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2013 Annual Program Review

Introduction

In 2003, the City of Cañon City was issued a permit for “Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (MS4s)” from the Colorado Department of Public Health and Environment (CDPHE). This permit was renewed in 2008. The 2003 permit required Cañon City to develop, implement and enforce a Colorado Discharge Permit System (CDPS) Stormwater Management Plan. The program had to be designed to reduce the discharge of pollutants from our storm sewer system to the maximum extent practicable to protect the water quality of the Arkansas River and Four Mile Creek and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act and Colorado Discharge Permit Regulations. The permit also requires that the City of Cañon City do a written annual review of the program and to submit an annual report to the State.

The MS4 discharge permit contains six areas the City must address in its stormwater management plan. These areas are:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Sites Runoff Control
5. Post-construction Stormwater Management
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

Each of the six areas has several program elements which are used to meet the goals of the stormwater management plan. The annual review looks at each of these elements to assess its compliance status and effectiveness.

Public Education and Outreach

The Public Education and Outreach program strives to increase the public’s awareness of potential local water quality problems associated with stormwater runoff. Its goal is to give people the information and tools they need to lessen their impact on stormwater runoff, which in turn can improve our local water quality. Assessment of effectiveness in this category is a subjective evaluation as it is difficult to directly track the effect each of these has on public awareness, participation and behavioral changes.

Discussion of Elements:

1. Forming Partnerships: The City of Cañon City is a member of, or involved in, several councils and associations. The following meetings were attended during 2013:

A. Colorado Stormwater Council (CSC):

i. Cañon City’s representative to the CSC was elected to serve as the Secretary for the Council in 2013. Eleven Administrative Committee meetings were attended; five of which were conference calls. Nine general membership meetings were attended; one of which was by phone.

ii. Seven Legislative Committee meetings were attended by conference call.

iii. Three meetings were attended by conference call concerning Regulation 85 – Nutrients.

iv. The Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (MS4s) permit was due for renewal in March, 2013. In November 2012, the CDPHE notified permit holders the permit would be significantly revised. The CDPHE initiated a series of stakeholder meetings to present possible revisions to the permit. During 2013, fourteen CSC meetings were attended either in person or by phone concerning the proposed language and requirements of the draft renewal permit.

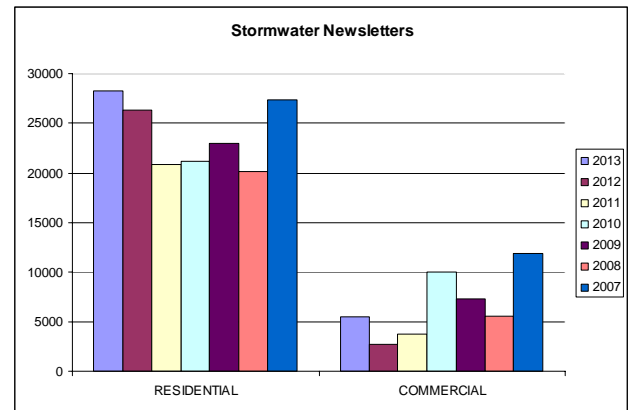
B. Colorado Department of Public Health and Environment draft renewal permit process: Ten meetings with CDPHE personnel were attended either in person or by phone. Numerous hours were spent in reviewing the proposed revisions and developing comments and suggestions for submittal to CDPHE in addition to attending the meetings to provide input on the proposed revisions to the permit.

C. The Water Department and the Stormwater Program were involved in developing a Source Water Protection Plan for the Upper Arkansas River Basin along with numerous other entities. During 2013, five meetings were attended by Stormwater Personnel.

D. The City of Cañon City is partnered with the Upper Arkansas Recycling Program and Cañon Proud Program.

2. Using Educational Materials and Strategies: All programs listed were ongoing and will continue to be utilized during 2014. Materials and strategies will be revised to maintain compliance when the new permit is issued.

A. Quarterly stormwater newsletters are sent out with City water bills and are available on the City of Cañon City's website. Each issue addresses stormwater concerns and provides information about the Stormwater Program and the prevention of illicit discharges. The public is encouraged to contact us with their concerns and questions or if they have suggestions for future topics or programs (newsletters include the contact information). There were 28,326 residential newsletters sent during 2013; 5,518 newsletters were sent to commercial establishments. The adjacent graph compares the amount of newsletters sent out each year from 2009 through 2013.



B. The website is updated regularly with the most current newsletter and annual report. The draft renewal stormwater permit and fact sheet were also posted on the website for public information.

C. Demonstrations/presentations are given as requested to local schools, groups and civic organizations. Programs are continually evaluated and updated. The following presentations were given in 2013:

i. A presentation was given to the Wolf Park Homeowner's Association.

ii. A stormwater information booth was set up at one of the craft fairs during the Blossom Festival on May 4. The booth had a total of 135 visitors. Numerous flyers, pamphlets, magnets, litter bags

and children's activity booklets were distributed. The EnviroScape was used to give 39 demonstrations about stormwater runoff.

iii. An EnviroScape demonstration on stormwater runoff was given to the 3rd and 4th grades at Cañon Exploratory School.

iv. A presentation was given to Cañon City High School West Wing students in conjunction with the stenciling project.

v. The Stormwater Program was a guest on KRLN's Morning Line to talk about the permit renewal process and stormwater in general.

vi. The Cañon City Daily Record ran an article about the Stormwater Program, the permit renewal process and the stenciling project.

D. Dissemination of industry appropriate stormwater BMP information is done through the quarterly newsletters. (See Section 2.A. above).

E. Fourteen public service announcements concerning stormwater were aired on local radio stations during 2013 for a total air time of 1,428 minutes (23.8 hours). Four stormwater-related programs were run on CCTV-Channel 19 with a total air time of 10 hours and 35 minutes. Public service announcements are rotated and new ones added throughout the year. Newspaper notices were also run in conjunction with the leaf pick-up program.

F. The Upper Arkansas Recycling Program received \$12,000 in financial support and advertising during 2013. Cañon Proud received \$2,719.60 in support and advertising for its annual city-wide clean-up program.

3. Signage and Stenciling:

A. Twenty-eight storm drains were re-stenciled in November with the assistance of 10 students from the Cañon City High School West Wing.



4. Reaching Diverse Audiences: Direct mail, public service announcements and programs and personal contact are all utilized to reach a broad spectrum of our citizens and businesses. Programs are evaluated and updated continually in order to reach as many people as possible and promote interest and participation in the programs. New programs are developed and implemented to maintain freshness in disseminating stormwater information.

5. Illicit Discharge Education to Businesses and the Public: The quarterly newsletter often addresses the issue of illicit discharges. It also provides tips for preventing contamination of stormwater runoff. One hundred pet waste brochures were left with the Humane Society for dissemination to visitors and staff.

Public Participation/Involvement

The goal of the Public Participation/Involvement area of our stormwater permit is to provide a method for the public to be involved with the City’s stormwater management program by providing feedback through a variety of ways. Assessment of effectiveness in this category is a subjective evaluation as it is difficult to directly track the effect each of these has on public awareness and participation.

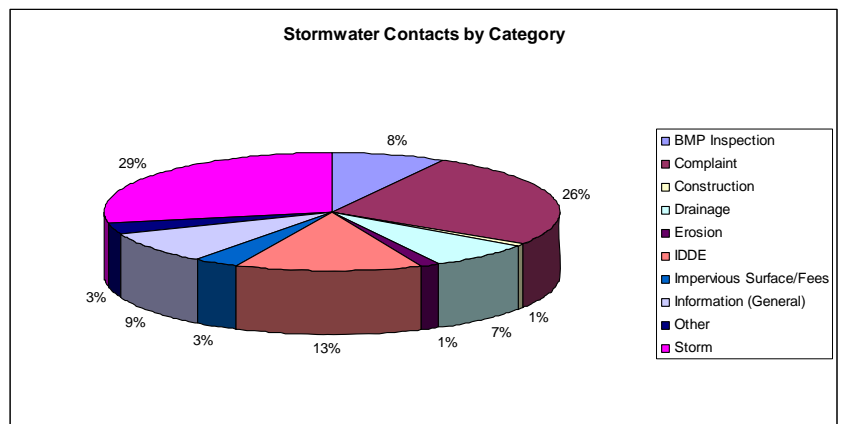
Discussion of Elements: All programs listed were ongoing and will continue to be utilized during 2014.

1. Public Notices: The City of Cañon City complies with the Open Meeting act as set forth in Colorado Revised Statutes. All public meetings are posted on a public bulletin board inside City Hall at least 24 hours in advance on any public hearing. A notice is also printed in the local newspaper. Meeting schedules, agendas and minutes are posted on the City of Cañon City’s website.

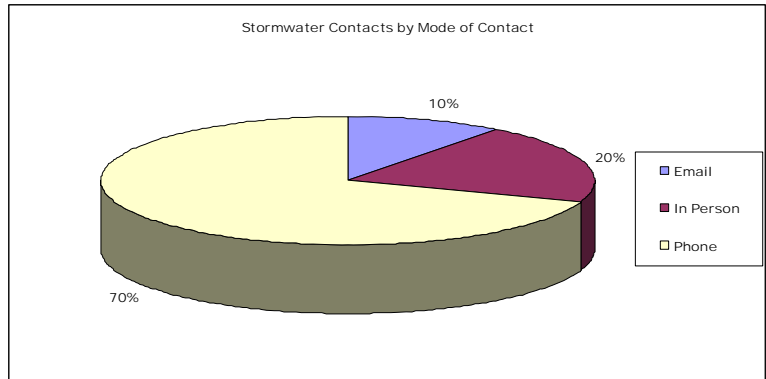
2. Contact Information Availability: Contact information is available through the quarterly newsletters and on the web page. It is also included in any newspaper articles and public service announcements. All City of Cañon City field staff have the Stormwater Technician’s direct line in order to report any suspected illicit discharges.

3. Feedback: The quarterly newsletters encourage everyone to get involved by calling, emailing or writing in with their questions, complaints or ideas. A log is kept of contacts (phone, email, letters and “in person”) concerning stormwater issues with the intent to better track the effectiveness of the public education and participation programs. The log represents those contacts handled directly by the Stormwater Technicians and those handled by other departments that the technician is made aware of. A database for stormwater calls was created in CarteGraph in December, 2010, to facilitate better tracking of calls. This database is available for use by Public Works and GIS as well as by the stormwater technicians. During 2013, 135 contacts were handled by the Stormwater Technicians. Of those calls, 18 resulted in illicit discharge investigations. The number and mode of contact are broken into the following categories:

Category	# of Calls	% of Calls
BMP Inspection	11	8
Complaint	35	26
Construction	1	1
Drainage	10	7
Erosion	2	1
Illicit Discharge	18	13
Impervious Surface/Fees	4	3
Information (General)	12	9
Other	4	3

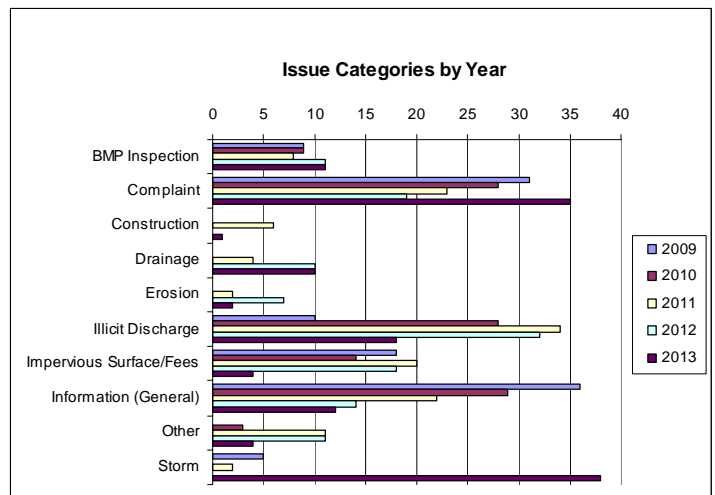


Mode of Contact	Number	%
Email	14	10
In Person	27	20
Phone	94	70



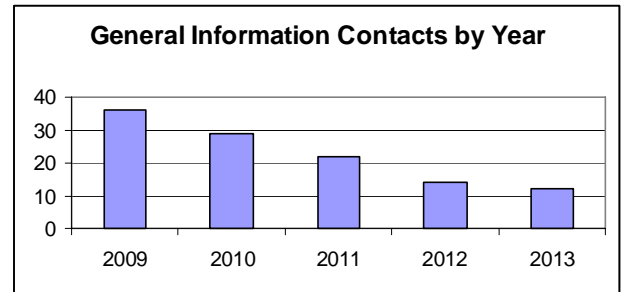
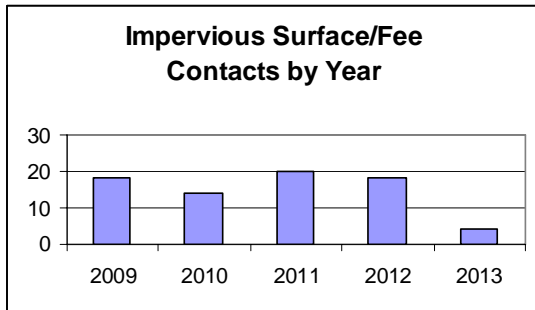
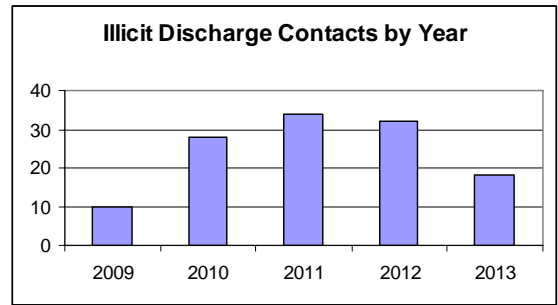
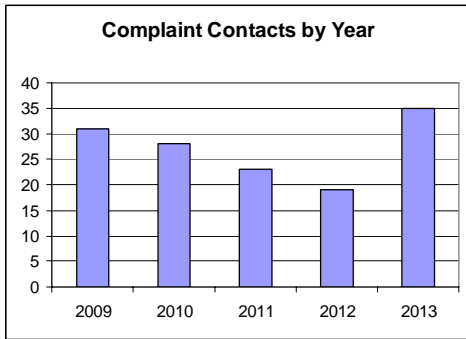
The number of contacts handled increased from last year’s 122 contacts. Due to the heavy storms received in August and September, the number of storm-related calls increased dramatically in 2013. Not all of these calls were in regards to storm damage within the City of Cañon City’s jurisdictional boundary (City Limits). Fremont County was included in the Presidential Disaster Declaration and was therefore eligible for FEMA grants. Cañon City participated in the County-wide Public Service Announcement which requested residents call in to report storm damage. The following table and graphs show the number of contacts received in each category for 2009 through 2013. Variability in categories may be attributed to better tracking of the contacts and revisions made to the database during the five years of tracking as well as training for municipal employees and public education and outreach. The Drainage, Erosion, Illicit Discharge and Storm categories are separated from the Complaint category for better tracking of issues, even though some of the calls in these categories could be considered complaints.

	2009	2010	2011	2012	2013
BMP Inspection	9	9	8	11	11
Complaint	31	28	23	19	35
Construction			6		1
Drainage			4	10	10
Erosion			2	7	2
Illicit Discharge	10	28	34	32	18
Impervious Surface/Fees	18	14	20	18	4
Information (General)	36	29	22	14	12
Other		3	11	11	4
Storm	5		2		38
Totals	109	111	132	122	135

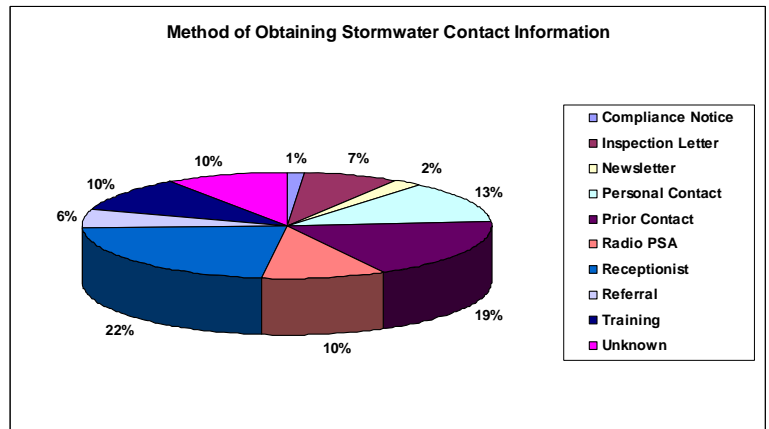


Contacts concerning permanent BMP inspections have remained relatively constant over the last 5 years. Complaints cover a variety of issues from blocked flowlines, BMP failure, debris, clogged culverts and inlets, pest control and sediment accumulation to complaints about streets and vegetation. Complaint contacts decreased from 2009 to 2012, but rose again during 2013. All complaints are addressed as promptly as possible. Complaint contacts resulted in 35 field investigations during 2013. Illicit discharge contacts showed an upward trend between 2009 and 2011 then decreased during 2012 and 2013. The decrease is most likely due to a decrease in overall illicit discharges in 2013 (See Section 3A under Illicit Discharge Detection and

Elimination). Inquiries concerning impervious surface/stormwater utility fees remained relatively constant from 2009 to 2012, but dropped dramatically in 2013. Contacts for general information have steadily declined since tracking began in 2009. The following graphs show the variation in these categories from 2009 to 2013.



The database in CarteGraph also facilitates tracking of other aspects of contacts such as how the contact information for the Stormwater Program was obtained in order to determine how effective our outreach efforts are. During 2013 most of the information was obtained either through personal contact, prior contact or via the receptionist. The adjacent chart shows the breakdown.



The CarteGraph database is also linked with ArcMap. Complaints and illicit discharge reports are plotted on the map to show areas which may need extra outreach and to assist in prioritizing infrastructure maintenance and capital projects.

Goals for Public Education and Outreach/Public Participation: The following were listed as goals in the 2012 program review. The comments following each show whether the goal was met during 2013 or carried over as a goal for 2014.

1. Increase the number of presentations to groups and schools. The number of presentations to groups and schools declined by one during 2013, but stormwater information was also disseminated via KRLN’s Morning Line and an article in the Cañon City Daily Record.

2. Have a booth at an additional festival (Blossom and at least one other). The Blossom Festival was the only festival a booth was present at. This will be a continuing goal for 2014.
3. Investigate the feasibility of starting an "Adopt-a-Drainageway" program. The feasibility of the program will continue to be investigated during 2014.
4. Have a river &/or drainageway clean-up day, possibly in conjunction with Cañon Proud. The feasibility of the program will continue to be investigated during 2014.
5. Update and increase the content of the Stormwater web page. The website is updated regularly with the most current newsletters and reports. The City website is scheduled to be completely updated during 2014 with many new features. The Stormwater pages will be updated during this process.
6. Develop a paint disposal brochure to be distributed to local paint supply stores. This will was not done, but may be developed in 2014.
7. Develop a BMP/grease disposal flyer for distribution to local restaurants. This will was not done, but may be developed in 2014.
8. Develop a wall mural program for local students to replace the river rafting bus murals. The feasibility of this program will be further investigated in 2014.
9. Host a Household Hazardous Waste collection day with Upper Arkansas Recycling in 2012 or 2013. The cost of this program limits its feasibility. This will remain a goal for 2014-2015.
10. Creation of new radio Public Service Announcements, possibly in conjunction with the Canon City High School or Pueblo Community College. New PSAs were not developed during 2013; however the staff at KRLN has offered to assist in creating new ads during 2014.

New Goals for 2014

1. Work with the Colorado Stormwater Council to develop outreach materials concerning nutrients as required by Regulation 85.
2. Continue to provide input and assistance to the Colorado Stormwater Council concerning the draft renewal stormwater permit and any other regulations undergoing review. Comments from Cañon City on the draft stormwater renewal permit will also be continued to be developed.
3. The draft renewal stormwater permit contained some new and revised requirements for Public Education and Outreach. CDPHE is working on a second draft after receiving comments during the Public Notice of the draft permit. Once the final permit is issued there may be some revisions needed to this portion of our Stormwater Management Program. If this is needed, a goal for 2014 and 2015 will be to revise and update our program elements as quickly and efficiently as possible to meet compliance. However, in the area concerning recordkeeping, we already have the database in place and are tracking the items the Division has proposed.

Illicit Discharge Detection and Elimination

The Illicit Discharge Detection and Elimination (IDDE) program identifies illegal discharges to the City's storm sewer system in order to reduce the frequency of these discharges and to protect the water quality of the Arkansas River and Four Mile Creek. Public education and municipal employee training about what constitutes an illegal discharge are important elements in this program. Monitoring of the storm sewer discharge pipes (outfalls) on the Arkansas River and Four Mile Creek as well as water quality testing if discharges are found are also integral parts of the program.

Discussion of Elements: All programs listed were ongoing and will continue during 2014.

1. Outfall Map: Outfall inspections and mapping continued during 2013. Outfalls are assigned to a category in the CarteGraph database based upon the primary type of flow. Many outfalls, though, will carry several types of flow (i.e. ground water, irrigation return and storm runoff). The categories are Footing/Foundation Drain, Groundwater Drain, Industrial Discharge, Irrigation Return, Major Outfall, Outfall, Outlet and Roof Drain. Prior to 2013 Footing/Foundations Drains and Roof Drains were consolidated into one category. In 2013 these

were separated into two categories for more accurate records. An outfall is the point where a municipal storm sewer discharges to waters of the United States. A major outfall is a pipe with an inside diameter of 36 inches or more or where stormwater enters waters of the United States from a drainage area of more than 50 acres. An outfall pipe with an inside diameter of 12 inches which drains land zoned for industrial activities is also considered a major outfall; these have been separated into the Industrial Discharge category. Outlets are the structural point where BMPs such as detention basins empty. Footing/Foundation and Roof Drains are only mapped if they discharge directly to a drainage or waterbody. There are a total of 529 outfalls and outlets located along the Arkansas River, Four Mile Creek and the various drainages and irrigation canals throughout the City. The City of Cañon City has jurisdiction over 240 of them; State Agencies have jurisdiction for 11 and 278 are under private jurisdiction. The breakdown for each category as well as the number mapped during 2013 (new and previously identified but unmapped) is detailed in the following table. There is one unclassified outfall on which a drainage investigation needs to be conducted in order to determine which (if any) category it belongs in.

Category	Total Number	Number Mapped in 2013
Footing/Foundation Drain	60	3
Groundwater Drain	32	8
Industrial Discharge	6	0
Irrigation Return	126	16
Major Outfall	25	3
Outfall	177	27
Outlet	73	3
Roof Drain	30	3

The footing/foundation and roof drains, groundwater drains and irrigation returns do not require yearly inspections or monitoring but are often noted during annual inspections of drainage channels. The City of Cañon City is currently not required to monitor industrial discharge outfalls as these are covered under separate discharge permits; again, these are often noted during other inspections. Outlets are inspected annually with the various BMPs. Outfalls and major outfalls are inspected annually (at a minimum). The outfall database in CarteGraph and the mapping assist in prioritizing inspections and monitoring the outfalls. During 2013, 303 inspections were conducted on outfalls, drains and outlets. The following table shows the breakdown of inspections.

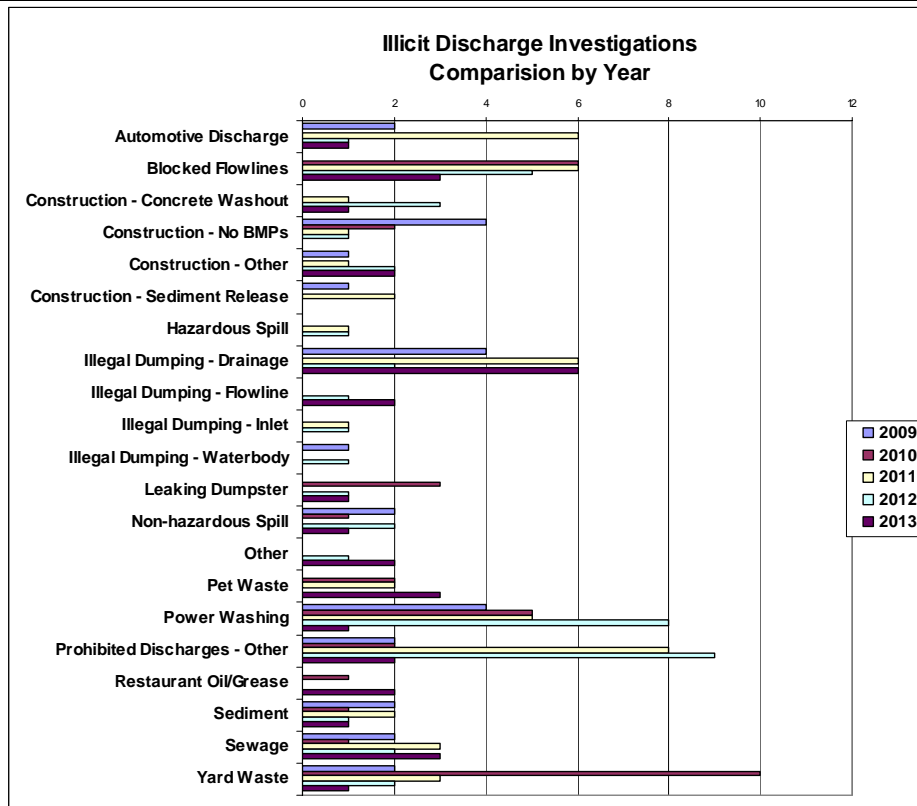
Category	Annual Inspections	Complaint	Initial	Monitoring	Post-Storm	Re-inspections	Storm
Footing/Foundation Drains	4		3				
Groundwater Drain	18		8				
Industrial Discharge	5						
Irrigation Return	40		13	1	4	1	2
Major Outfall	15	1			1		
Outfall	85	2	16		8	1	6
Outlet	46		2		8	2	3
Roof Drains	5		3				

2. Regulatory Mechanism: The City of Cañon City adopted Ordinance No. 20, Series of 2005 to establish codes concerning illicit discharges. Some minor changes were made to the Ordinance, effective September 9, 2012 through Ordinance No. 14, Series of 2012 AN ORDINANCE MAKING CERTAIN MINOR AMENDMENTS TO THE CITY’S STORMWATER REGULATIONS. The Ordinance can be viewed on the City of Cañon City’s website at www.canoncity.org.

3. Illicit Discharge Detection and Elimination Plan:

Thirty-two incidents of potential illicit discharges were investigated in 2013, which is down from forty-four in 2012. Illicit discharges are assigned a category in the CarteGraph database to assist in identifying types of pollutants which may need targeting through our Public Education program. The following table shows how many investigations for each category were conducted during the year. The accompanying chart compares investigations for each category for the past five years.

Category	Investigations	Category	Investigations
Automotive Discharge	1	Leaking Dumpster	1
Blocked Flowlines	3	Non-hazardous Spill	1
Construction – Concrete Washout	1	Other	2
Construction – No BMPs	0	Pet Waste	3
Construction – Other	2	Power Washing	1
Construction – Sediment Release	0	Prohibited Discharges – Other	2
Hazardous Spill	0	Restaurant Oil/Grease	2
Illegal Dumping – Drainage	6	Sediment	1
Illegal Dumping – Flowline	2	Sewage	3
Illegal Dumping – Inlet	0	Yard Waste	1
Illegal Dumping – Waterbody	0		



Investigations resulted in the following illicit discharge enforcement measures:

Enforcement Action	Number
Verbal Warning	16
Notice of Non-Compliance	4
Cease & Desist	0
Notice of Violation & Enforcement Action w/ fine	0
Letters detailing violation/corrective action	0
Emails detailing violation/corrective action	1

- A. The database in CarteGraph facilitates tracking of other aspects of illicit discharge reports and investigations such as repeat violators. There were 2 repeat violators in 2013. The CarteGraph database is also linked with ArcMap. Illicit discharge reports are plotted on the map to show areas which may need extra outreach or monitoring.
- B. No water quality samples were taken during 2013. Benthic macroinvertebrate sampling of the Arkansas River and Four Mile Creek was not conducted in 2013 due to time constraints and budgetary concerns.

4. Staff Education: Two illicit discharge trainings were held for forty-three City Public Works employees. In addition to the review sessions, forty Illicit Discharge Pocket Reference booklets were distributed to the Police Department.

Goals for Illicit Discharge Detection/Water Quality: The following were listed as goals in the 2012 program review. The comments following each show whether the goal was met during 2013 or carried over as a goal for 2014.

1. Begin additional testing of ground water discharges to drainage channels and ditches to establish more complete background data. This goal will be carried over to 2014. The initial draft data survey required by Regulation #85, which was issued by CDPHE in 2012, did not identify any data gaps in water quality data for nutrients. This report will be submitted to CDPHE prior to the October 2014 deadline via the Colorado Stormwater Council. Therefore, at this time, no additional water quality monitoring for nutrients will be required of Cañon City. A comprehensive monitoring plan needs to be developed which takes into consideration potential future requirements resulting from the stormwater renewal permit.
2. Finish mapping of inlets, storm pipes, storm culverts and manholes. Outfall and inlet mapping is finished and will be updated when inlets and outfalls are removed or moved during construction or new ones added. The CarteGraph database for manholes has been populated with available data. It will continue to be updated during 2014. CarteGraph databases for pipes and culverts have been created but not yet populated. These databases will be completed in 2014.
3. Develop land use maps for each drainage basin and associated outfalls. Once mapping has been completed these will be developed.
4. Update the IDDE manual. An update was done in 2012 but is currently on hold pending potential permit requirement revisions in the revised stormwater permit which is due to be issued in 2014.

Construction Site Runoff Control

The Construction Sites Runoff Control area of our Stormwater Management Program is designed to reduce, as much as possible, sediment and other construction-related pollutants from entering our storm sewer system or from being discharged into the Arkansas River, Four Mile Creek and other drainages throughout the city.

Discussion of Elements: All programs listed were ongoing and will continue to be utilized during 2014.

1 -3. Regulatory and Compliance Mechanisms: Ordinance No. 20, Series of 2005 and the City of Cañon City Grading, Erosion & Sediment Control (GES) Manual were enacted in 2006. They have proved effective in obtaining compliance for construction site stormwater management.

4. Site Plan Review: The current procedures for site plan review are addressed through the City of Cañon City's Grading, Erosion and Sediment Control Manual and the Subdivision and Development Regulations.

5. Procedures for receipt and consideration of information submitted by the public: A database is kept of all contacts (phone, email, letters and "in person") concerning stormwater issues with the intent to better track

the effectiveness of the public education and participation programs. (See Section 3. under “Public Participation/Involvement”) All complaints and concerns are addressed promptly. Any illicit discharge investigations resulting from a complaint or concern submitted by a citizen is logged into the Illicit Discharge database in CarteGraph and can be cross-referenced through the Contact database.

6. Site inspections and enforcement of control measures: Inspections are performed at all construction sites and post-construction sites with appropriate enforcement actions being taken when needed. During 2013, forty inspections were performed at thirteen sites. There were twelve full inspections and twenty-eight reconnaissance inspections. During 2013 there were seven active Grading, Erosion and Sediment Control (GESC) permits at six sites. Three of the GESC permits were issued during 2013. There were seven active Drainage, Erosion and Sediment Control (DESC) permits; six of those were issued in 2013. The inspections resulted in the following actions:

Enforcement Action	Number
Verbal Warning	0
Notice of Non-Compliance	6
Cease & Desist	0
Stop Work Order	0
Notice of Violation & Enforcement Action w/ fine	0

A detailed tracking system is in place to assess the number and nature of inspections and actions and to identify repeat violators. There were no repeat violators during 2013.

7. Training and education for construction site operators: This is achieved using the GESC manual and through the plan review process. New information and resources are passed to local contractors and developers when available.

Cañon City joined forces with the City of Pueblo and the Pueblo County Engineering and Public Works Department to host a Regional Stormwater Seminar on February 5, 2013. The seminar was geared toward contractors, developers and engineers who work throughout the region, as well as municipal employees. Featured topics and speakers were Lisa Pine, CDPHE, on the new State Stormwater Excellence Program; Andrew Earles, Wright Water Engineers, on Low Impact Development; Alan Searcy, representing the Colorado Stormwater Council, on Learning from State and Federal Stormwater Audits; and Rik Gay, CDPHE, on the State Stormwater Construction Permit. The seminar was held in Pueblo and attended by approximately seventy people. The full report is kept with the MS4 permit documentation for 2013.

Goals for Construction Site Runoff Control: The following were listed as goals in the 2012 program review. The comments following each show whether the goal was met during 2013 or carried over as a goal for 2014.

1. Cross-training between the stormwater technicians on construction inspection techniques. This goal has been carried over to 2014.
2. Update of the GESC Manual to reflect changes in the updated UDFCD Volume 3 and any changes made to the revised MS4 Permit. This will be done in 2014-2015 once the revised stormwater permit is issued.
3. Continue to co-host regional stormwater seminars for contractors, developers, engineers and municipal employees. A second annual seminar has already been scheduled for February 5, 2014 in Cañon City.

Post-construction Stormwater Management

Per the City of Cañon City’s MS4 permit, the Post-construction Stormwater Management program must reduce the stormwater impacts from areas of new development and significant redevelopment as much as possible through planning procedures and enforcement mechanisms.

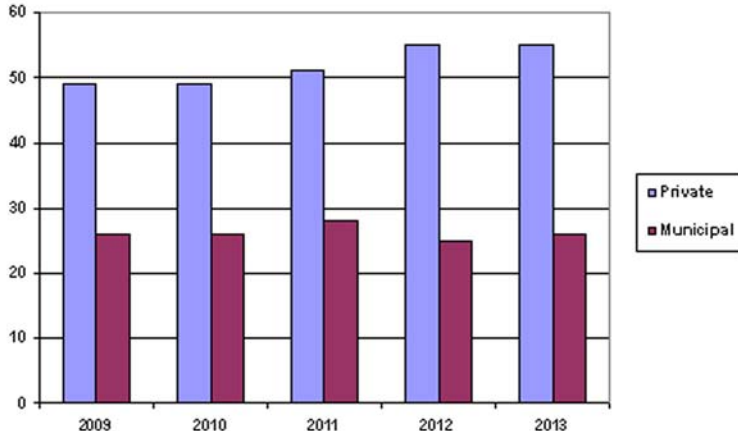
Discussion of Elements: All programs listed were ongoing and will continue to be utilized during 2014.

1 & 5. Regulatory Mechanisms: Ordinance 20, Series of 2005 addresses the requirements for post-construction permanent BMPs including technical standards and specifications, review and approval procedures and the long-term operation and maintenance of the BMPs.

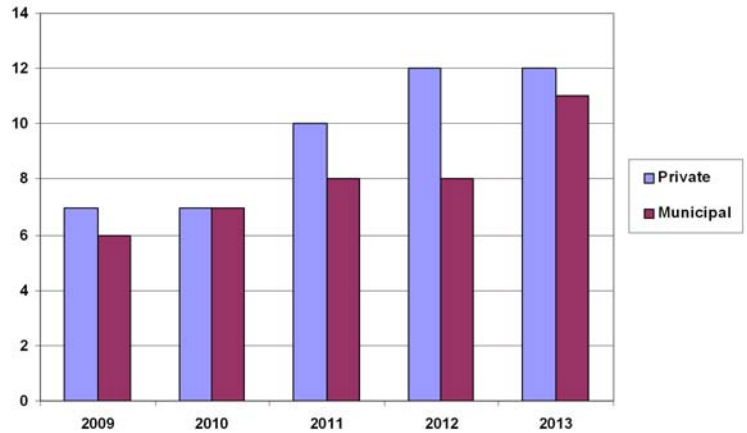
2. & 3. Design Criteria & Standards and Review & Approval Procedures: The site plan review process assures that post-construction structural BMPs meet design standards. Inspections during the construction process and final inspections assure that the BMP has been properly constructed.

4. Tracking: Permanent BMPs are recorded at final inspection and entered into the CarteGraph database. Three new permanent BMPs were implemented during 2013. These included a detention basin, a grass swale and a water quality vault. One detention basin was removed and replaced with the grass swale during construction of a new building on the site. The rain garden at Pueblo Community College – Fremont Campus was removed from inspections after being inspected in 2013. The following graphs show the number of private and municipal BMPs inspected each year from 2009 to 2013. Yearly variation in numbers reflects new BMPs added, transfer of jurisdiction from the County to the City, and BMPs removed from service.

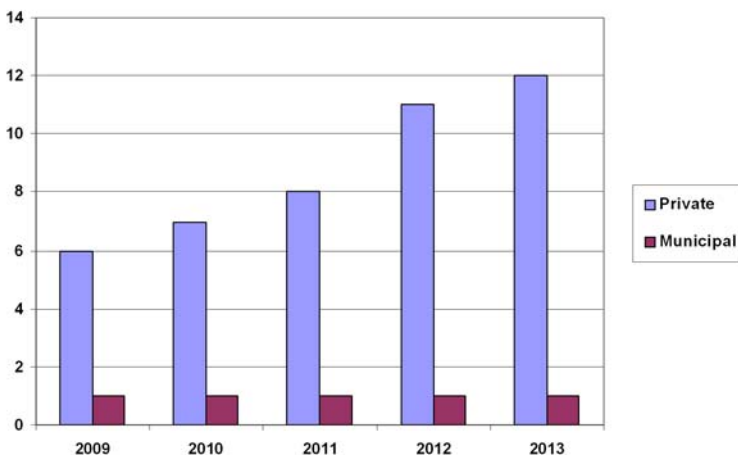
Detention Basins



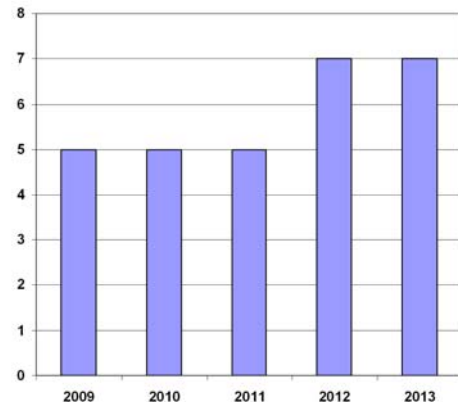
Water Quality Vault & Sand Trap Counts

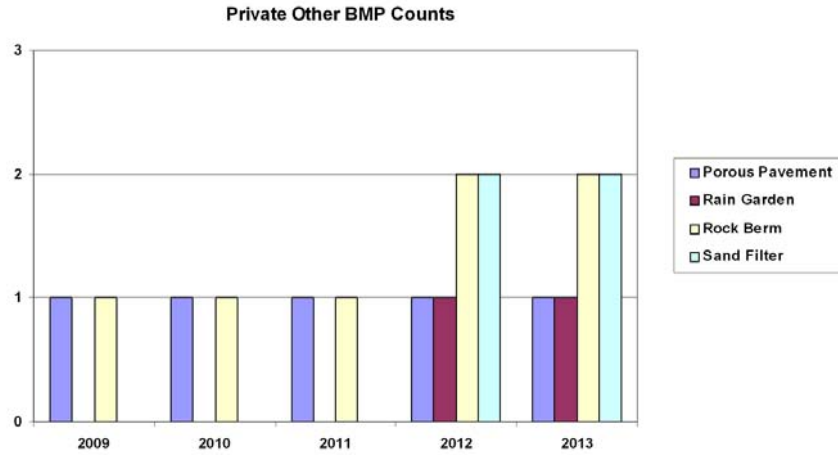


Grass Swale Counts



Private Porous Landscape Detention Counts

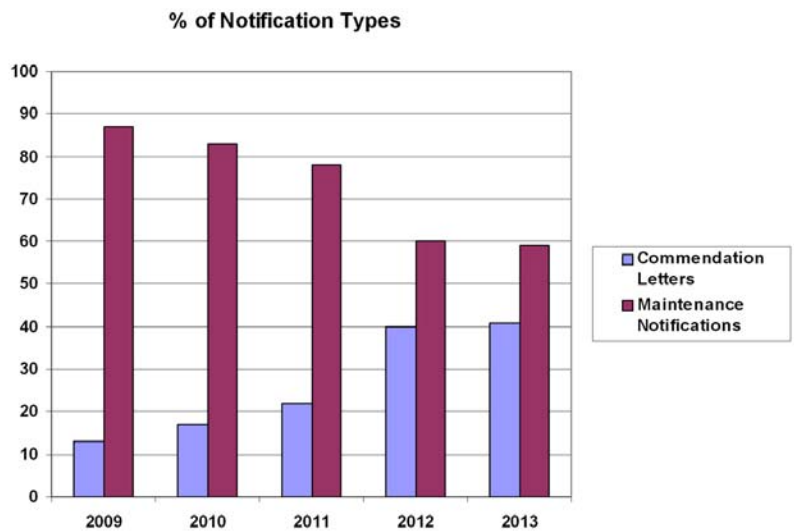




6. Monitor long-term compliance: One hundred twenty-nine permanent BMPs are inspected at least annually with the results of those inspections entered into the CarteGraph database. An inspection report and letter are sent to the custodian of the BMP. If deficiencies are noted the BMP is re-inspected approximately 30 days later (depending upon the severity of the problem noted) and enforcement procedures are instituted if the corrective maintenance has not been done. During 2013, a total of one hundred eighty-eight inspections were performed on permanent BMPs. The following table shows the breakdown of the inspections.

	Private/Federal/County			Municipal		
	Basins	Storm Vaults	Other BMPs	Basins	Storm Vaults	Other BMPs
Annual	50	11	21	17	8	1
Complaint	0	0	0	0	0	0
Illicit Discharge	0	0	0	0	0	0
Initial	1	0	1	0	3	0
Maintenance	0	0	0	1	0	0
Monitoring	0	0	0	0	0	0
Post-Storm	6	1	3	8	0	0
Re-inspection	23	6	11	5	0	0
Storm	3	1	1	6	0	0

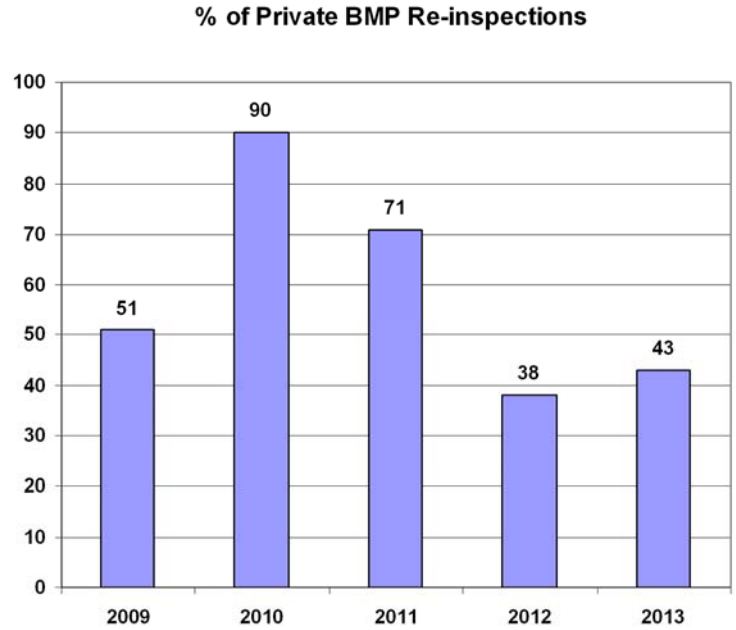
Forty-three letters and ten emails were sent out to non-municipal custodians indicating some level of non-compliance (i.e. needing maintenance). One custodian was notified verbally of maintenance needed. Five letters were sent after a re-inspection revealed the requested maintenance had not been done. Thirty-eight of the inspections resulted in letters of commendation being sent to non-municipal custodians. The results from inspections of municipal stormwater facilities were sent to the appropriate department heads. The adjacent graph shows the trends in commendation letters and maintenance notifications sent out from 2009 to 2013. Numbers are shown as percentages of total BMPs. Maintenance notifications include those sent by mail, email, or done by phone and re-inspection notifications of incomplete work. Commendation letters have increased yearly while maintenance notifications have decreased each year.



Maintenance notifications include those sent by mail, email, or done by phone and re-inspection notifications of incomplete work. Commendation letters have increased yearly while maintenance notifications have decreased each year.

The adjacent graph shows the trends in re-inspections from 2009 to 2013 for BMPs under private custodianship. Numbers are shown as a percentage of BMPs which needed to be re-inspected after maintenance notices were sent out. Some BMPs were re-inspected more than once depending upon the time frame needed for completion of requested maintenance.

This does not match the graph for percentage of maintenance notifications by year, which is due to the fact that maintenance letters are not always sent out after each re-inspection if there are only minor items left to be completed.



2014 Goals for Post-construction Stormwater Management

1. Update procedures and program elements as needed to comply with the stormwater renewal permit once it is issued.

Pollution Prevention/Good Housekeeping For Municipal Operations

The focus of this area of the Stormwater Management Program is to reduce the amount and type of pollution that is generated by municipal operations or from municipally-owned properties to the maximum extent practicable. The City of Cañon City’s Stormwater Management Program Descriptions for the 2008 – 2013 Stormwater Permit contained the Measurable Goal of “Written procedures and lists for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee’s municipal operations.” This goal was met in 2009.

Discussion of Elements: All programs listed were ongoing and will continue to be utilized during 2014.

1. Implementation of an Operation & Maintenance program:

All municipally owned facilities (including parks) are inspected annually. The results of the inspections are sent to the appropriate department heads for compliance. Follow-up inspections are done to insure required maintenance is completed. In 2013, forty-two facilities were inspected. One new facility was added to City jurisdiction. One required a follow-up inspection. The adjacent table shows the breakdown of facilities by department.

Department	# of Facilities
Cemetery	2
Stormwater	1
Equipment Repair	1
Parks	25
Streets	1
Water Distribution	1
Water Treatment	11

In addition to the facilities, drainage channels (including those under private custodianship) are inspected. Sixty-six channels under the custodianship of the City of Cañon City and twenty-seven under private custodianship were inspected during 2013. The following chart shows the breakdown for inspection types.

Channels	Private	Municipal
Annual	27	64
Complaint	0	1
Initial	0	1
Maintenance	0	2
Post-storm	0	8
Re-inspection	6	2
Storm	1	3

Of the twenty-seven channels under private custodianship, seventeen letters of commendation for keeping the channels clean were sent out and seven letters indicating some level of maintenance was needed were sent. Three letters were sent out indicating that the requested maintenance had not been completed after a re-inspection. Routine maintenance (i.e. mowing, trash clean-up) was performed on fourteen of the municipal channels during 2013.

Inlets are mapped and categorized as part of our Stormwater Program. A percentage of those are inspected yearly. A total of 1,002 inlets have been identified and mapped to date. Of these, 615 are under municipal jurisdiction, 43 are under county/state/federal jurisdiction and 344 are under private jurisdiction. Like outfalls, inlets are assigned to a primary category in the CarteGraph database. The categories are Irrigation Clean-out, Overflow, Storm Clean-out and Storm Inlet. Irrigation clean-outs and overflows are only mapped when they are designed or have the potential to also receive stormwater runoff. The breakdown for each category as well as the number mapped during 2013 (new and previously identified but unmapped) is detailed in the following table.

Category	Total Number	Number Mapped in 2013
Irrigation Clean-out	190	2
Overflow	14	0
Storm Clean-out	31	3
Storm Inlet	767	25

There were 227 inlet inspections done during 2013. The following table shows the inspections done per category of inlet.

Category	Annual	Complaint	Initial	Maintenance	Monitoring	Other	Post-Storm	Re-inspection	Stenciling	Storm
Irrigation Clean-out	9	1	2	0	0	1	0	2	1	0
Overflow	2	0	0	0	0	0	1	0	0	1
Storm Clean-out	8	0	3	0	0	0	0	0	0	0
Storm Inlet	130	6	17	2	2	1	3	3	27	5

The CarteGraph databases for storm manholes, storm pipes and culverts were created in 2013. One hundred sixty-six manholes have been added into the database. One hundred thirty-one manholes are under Cañon City's jurisdiction; thirteen are under county/state/federal jurisdiction and twenty-two are under private jurisdiction. Fifteen inspections were done in 2013. Data still needs to be collected for the majority of manholes. Pipe and culvert data still need to be added to the respective databases.

Stormwater infrastructure projects completed during 2013:

- Inlets on 5th Street at Main Street and Highway 50 were rebuilt and moved
- Stormwater infrastructure was replaced during construction on N. Reynolds Ave at Highway 50 and E. Main
- Stormwater infrastructure was added along North Sand Creek in conjunction with the Riverwalk extension
- Stormwater infrastructure was added on S. 2nd Street during the Highland Ave paving project
- A water quality vault was installed on S. 9th Street in conjunction with the round-about construction
- Post-storm repairs and maintenance was done on the Orchard Detention basin and channel, the WPA channel and the Glenfield Meadows detention basin. Storm damage to City infrastructure totaling \$22,120.17 was reported for the FEMA grant. If the grant is approved, the Stormwater Fund should be reimbursed \$163,276.08 and the General Fund should receive \$30,204.27.

2. Employee training: Two municipal pollution prevention trainings were held for forty-three City Public Works employees.

Goals for Pollution Prevention/Good Housekeeping For Municipal Operations: The following was listed as a goal in the 2012 program review. The comments following each show whether the goal was met during 2013 or carried over as a goal for 2014.

1. Complete the databases for manholes, culverts and storm pipes. More data needs to be gathered and entered into each database.
2. A new goal for 2014 will be to revise and add program elements as needed to meet new or revised requirements in the revised stormwater permit once it is issued.

Other Trainings, Conferences and Projects:

1. Urban Drainage and Flood Control District conference
2. Stormwater Virtual Expo and seminars
3. EPA webinar on the National Rivers and Streams Assessment
4. USGS webinar on Modernizing Water Time-Series Data Collection
5. Confined Space Training
6. Webinar on User-Fee Funded Stormwater Utilities Update
7. EPA webinar on the new Stormwater Calculator
8. Monthly Safety meetings and trainings