



# City of Cañon City

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## 2011 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. This permit was renewed in 2008. The 2003 permit required Cañon City to develop, implement and enforce a Colorado Discharge Permit System 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 the 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

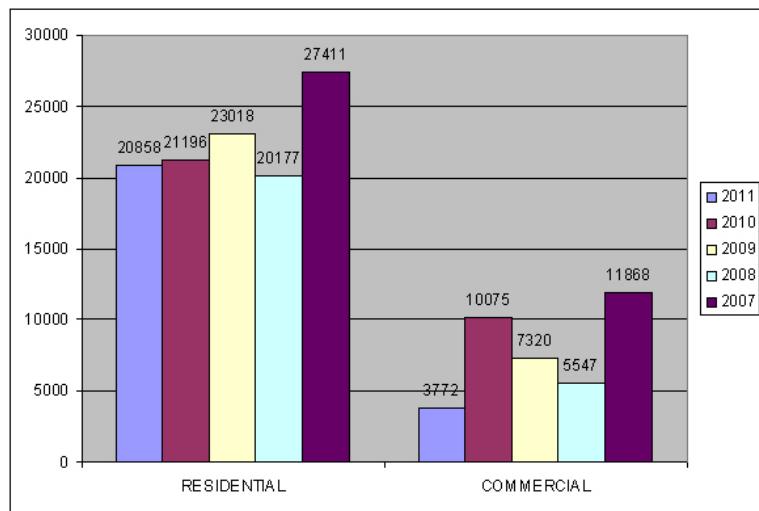
The Public Education and Outreach program strives to increase the public's awareness of potential local water quality problems associated with stormwater runoff. Its goal is to give people the information and tools they need to lessen their impact on stormwater runoff, which in turn can improve our local 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 and participation.

### 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 2011:
  - A. Colorado Stormwater Council: 9 meetings attended (5 via phone). Beginning in January, 2011, Cañon City also became involved in the Legislative Committee of the Stormwater Council. Seven Legislative Committee meetings were attended.
  - B. Urban Drainage and Flood Control District: 3 quarterly meetings.
  - C. Attended the Floodplain Management Association's Annual Conference.
  - 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 2012.

A. Quarterly stormwater newsletters are sent out with City water bills. 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 also include the contact information. There were 20,858 residential newsletters sent in 2011 and 3,772 newsletters sent to commercial establishments. This year the newsletters were sent to businesses only once a quarter instead of each month. There was a special business edition sent out during the 2<sup>nd</sup> quarter which addressed concerns such as power washing, keeping storm inlets clean and material storage and waste disposal.



B. All past newsletters were added to the Stormwater web page in 2011, with current ones added quarterly. The 2010 Annual Report and 2010 Arkansas River Water Quality Report were also added. A mock-up of a new Stormwater web page was completed which is being considered for the City's website update. It will include more general information, additional links and access to more reports. Some examples of areas that could be added or updated are watershed information, stormwater impacts on water quality and what the public can do to minimize their impact on stormwater, more complete illicit discharge information, BMPs, annual reports on inspections and compliance and public participant events.

C. Demonstrations/presentations in local schools and to civic organizations are given as requested. Programs are continually evaluated and updated. Presentations were given to the following during 2011:

- i. Five (5) EnviroScape and water quality field testing demonstrations to 105 students at Harrison Elementary School during their Outdoor Education Day.
- ii. Coordinated 5 talks to the Mile High Youth Corps.
- iii. Presentation to Garden Park High School in conjunction with the stenciling project.
- iv. An EnviroScape demonstration and stormwater information was presented to the Starpoint Life Development Skills class.
- v. A stormwater information booth was set up at one of the craft fairs during the Blossom Festival on May 7-8. The booth had a total of 317 visitors which was up from 256 in 2010. Numerous flyers, pamphlets and children's activity booklets were distributed. The EnviroScape was used to give 66 demonstrations about stormwater runoff.

D. The contest to design new storm water murals for display on river rafting shuttle buses was removed from the permit's program elements. A program modification was submitted to CDPHE on 8/21/10. It modified the program element to read as follows: "Coordinate with Cañon City area schools, civic organizations, businesses and local artists to design, produce and display stormwater

related materials as needed for educational campaigns.” The rationale for the program modification is that the murals have been designed and produced and are still in good shape for display.

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

F. Public service announcements concerning stormwater were aired on local radio stations during 2011 for a total air time of 1,077 minutes. Leaf pick-up announcements were run during morning programs from mid-October to the end of November. Four stormwater-related programs were run on CCTV-Channel 19 with a total air time of 10 hours and 35 minutes. Public service announcements and programs are rotated and new ones added throughout the year. Newspaper notices were also run in conjunction with the leaf pick-up program.

G. The Upper Arkansas Recycling Program received \$12,666 in financial support and advertising during 2010. Cañon Proud received \$2,362.50 in support this year for its annual city-wide clean-up program.

### **3. Signage and Stenciling:**

A. Eighty-six (86) storm drains were stenciled in 2011 with the assistance of eight (8) students from Garden Park High School. Since a majority of the inlets within the City limits have been stenciled a modification to this program element was submitted with the 2010 Annual Report to the State. It changed the wording from “Annually stencil twenty-five high visibility stormdrains inlets utilizing stencils developed locally by high school students and/or service groups” to “Annually refresh stormdrain stencils as needed and stencil any new stormdrain inlets which have been placed into service.”



B. Murals were not displayed on river rafting busses due to the mural size interfering with regulations regarding the display of identification of the buses. A program modification was submitted to CDPHE on 8/21/10 removing this program element.

### **4. Reaching Diverse Audiences:** Direct mail, public service announcements and programs and personal contact were all utilized in 2011 to reach a broad spectrum of our citizens and businesses. A stormwater information booth was set up at one of the craft fairs during the Blossom Festival on May 7-8. The booth had a total of 317 visitors. Numerous flyers, pamphlets and children’s activity booklets were distributed. The EnviroScape was used to give 66 demonstrations about stormwater runoff. 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. In June, 940 Business Edition newsletters were sent to local businesses concerning power washing of parking lots, cleaning of storm inlets, material storage and waste disposal.

## 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.

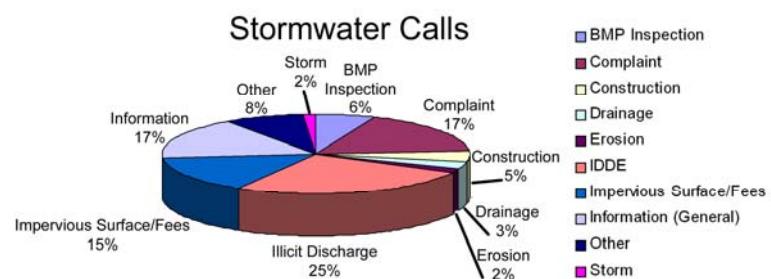
**Discussion of Elements:** All programs listed were ongoing and will continue to be utilized during 2012.

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.

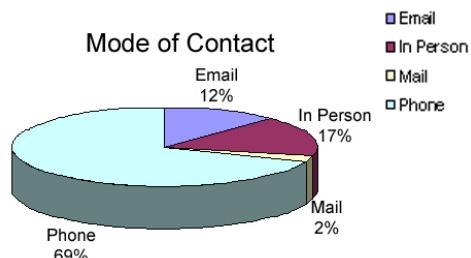
2a. **Contact Information Availability:** Contact information is available through the quarterly newsletters and on the web page. It is also included in any newspaper articles and public service announcements. All City of Cañon City field staff have the Stormwater Technician's direct line in order to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

2b. **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 Technician 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 2011, 132 contacts were handled by the Stormwater Technicians. Of those calls, thirty-one (31) resulted in illicit discharge investigations. Calls and mode of contact were broken into the following categories:

Category	# of Calls	% of Calls
BMP Inspection	8	6
Complaint	23	17
Construction Related	6	5
Drainage	4	3
Erosion	2	2
Illicit Discharge	34	25
Impervious Surface/Fees	20	15
Information (General)	22	17
Other	11	8
Storm Related	2	2



Mode of Contact	Number	%
Email	16	12
In Person	22	17
Mail	3	2
Phone	91	69



The number of calls increased from last year's 111. Complaint calls dropped slightly from 25 in 2010 to 23 in 2011 as did general information calls (26 in 2010 vs. 22 in 2011). Calls about BMP inspections stayed the same (8 in both 2010 and 2011). There were 25 illicit discharge calls in 2010 which increased to 34 in 2011. This is most likely due to increased awareness of illicit discharges by the public and City employees. Calls about impervious surface and stormwater fees increased from 13 in 2010 to 20 in 2011. Other calls which do not fit into a specific category increased from 3 in 2010 to 11 in 2011. Construction, drainage, erosion and storm categories were added to the database in 2011. There were 94 callers of which 12 were City employees.

### **2012 Goals for Public Education and Outreach/Public Participation**

1. Increase the number of presentations to groups and schools.
2. Have a booth at an additional festival (Blossom and at least one other).
3. Investigate the feasibility of starting an "Adopt-a-Drainageway" program.
4. Have a river &/or drainageway clean-up day, possibly in conjunction with Cañon Proud.
5. Update and increase the content of the Stormwater web page.
6. Develop a paint disposal brochure to be distributed to local paint supply stores.
7. Develop a BMP/grease disposal flyer for distribution to local restaurants.
8. Develop a wall mural program for local students to replace the river rafting bus murals.
9. Host a Household Hazardous Waste collection day with Upper Arkansas Recycling in 2012 or 2013.
10. Enter past complaints and calls into the database to facilitate better tracking of potential problem areas the City may address.

### **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 2012.

1. **Outfall Map:** Outfall Reconnaissance Inventories (ORIs) and mapping continued during 2011. There are a total of 448 outfalls 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 215 of them; State Agencies have jurisdiction for 8 and 225 are under private jurisdiction. Outfalls are assigned to a

primary category in the CarteGraph database. The categories are Footing/Roof Drain, Groundwater Drain, Industrial Discharge, Irrigation Return, Major Outfall, Outfall and Outlet. The breakdown for each category as well as the number mapped during 2011 (new and previously identified but unmapped) is detailed in the following table.

Category	Total Number	Number Mapped in 2011
Footing/Roofing Drain	77	7
Groundwater Drain	23	11
Industrial Discharge	6	1
Irrigation Return	109	29
Major Outfall	22	5
Outfall	147	46
Outlet	64	16

The footing/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 not required to monitor industrial discharge outfalls as these are covered under separate discharge permits; though, again, these are often noted during other inspections. Outlets are the structural point where BMPs such as detention basins empty. These are inspected annually with the various BMPs. 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. Outfalls and major outfalls are inspected annually. There are approximately 9 outfalls that have been previously identified on the Oil Creek Ditch which still need to be verified and mapped. The outfall database in CarteGraph and the mapping assist in prioritizing inspections and monitoring of the outfalls. During 2011, 338 inspections were conducted on outfalls. The following table shows the breakdown of inspections.

Category	Annual Inspections	Re-inspections
Footing/Roofing Drain	27	0
Groundwater Drain	22	0
Industrial Discharge	6	0
Irrigation Return	74	1
Major Outfall	19	0
Outfall	122	4
Outlet	61	2

2. **Regulatory Mechanism:** The City of Cañon City adopted Ordinance No. 20, Series of 2005 to establish codes concerning illicit discharges.
3. **Illicit Discharge Detection and Elimination Plan:**
  - A. Forty-eight incidents of potential illicit discharges were investigated in 2011. Of those, 47 were valid, requiring investigation. Investigations resulted in the following enforcement measures:

Enforcement Action	Number
Verbal Warning	29
Notice of Non-Compliance	10
Cease & Desist	0
Notice of Violation & Enforcement Action w/ fine	0
Letters detailing violation/corrective action	2
Emails detailing violation/corrective action	2

The number of illicit discharge reports was up from last year's 34. This is most likely due to increased awareness and reporting from the public and municipal employees. More verbal warnings and Notices of Non-Compliance were issued than last year.

B. In December, 2010, a database was created in CarteGraph to track illicit discharge investigations. This helps to better track the issues resulting in investigations and potential repeat offenders, of which there were 3 in 2011. The following table shows the number of investigations per category of illicit discharge for 2011.

Illicit Discharge Category	Number of Investigations
Automotive Discharge	6
Blocked Flowlines	6
Construction – Concrete Washout	1
Construction – No BMPs	1
Construction – Other	1
Construction – Sediment Release	2
Hazardous Spill	1
Illegal Dumping – Drainage	6
Illegal Dumping – Inlet	1
Illegal Dumping – Waterbody	0
Leaking Dumpster	0
Non-hazardous Spill	0
Pet Waste	2
Power Washing	5
Prohibited Discharge – Other	8
Restaurant Oil/Grease	0
Sediment	2
Sewage	3
Yard Waste	3

C. Only one water quality sample was taken in 2011 to determine the source of a water leak on Bellows Court. The sample was requested by the Public Works Water Distribution Department to verify that it was a sanitary sewer leak rather than a water main leak. Tests confirmed that it was from a sanitary sewer lateral pipe. No other dry weather discharges with the potential to be an illicit discharge were found during inspections. Benthic macroinvertebrate sampling of the Arkansas River and Four Mile Creek was not conducted in 2011 due to time constraints and budgetary concerns.

4. **Staff Education:** A training session for illicit discharge detection was held for new City staff on July 13<sup>th</sup>. The training session consisted of a video on municipal pollution prevention and a PowerPoint

presentation on recognizing potential illicit discharges and procedures when one is seen. Attendance included 4 Public Works staff members and 3 Parks Department staff members.

### **2012 Goals for Illicit Discharge Detection/Water Quality**

1. Begin additional testing of ground water discharges to drainage channels and ditches to establish more complete background data.
2. Finish mapping of outfalls, inlets, storm pipes, storm culverts and manholes. (This is about 95% complete.) Once mapping has been completed on the pipes, culverts and manholes a CarteGraph database will be finished for each.
3. Develop land use maps for each drainage basin and associated outfalls.
4. Update the IDDE manual. This will be done after the Colorado Department of Public Health and Environment's Water Quality Control Division has made its final determination on the new Regulation #85 concerning nutrients (total phosphorous and total nitrogen monitoring/removal requirements).
5. Continue to provide input and assistance to the Colorado Stormwater Council regarding Regulation #85 and any other regulations undergoing review.
6. Scan all drainage basin studies so they are available in Adobe Acrobat format upon request.
7. Enter past IDDE investigations and results into the CarteGraph database to facilitate better tracking of illicit discharges.

### **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 2012.

1 -3. **Regulatory and Compliance Mechanisms:** Ordinance No. 20, Series of 2005 and the City of Cañon City Grading, Erosion & Sediment Control (GESC) 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 reviews prior to construction are under review.

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 2b. 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 2011, 94 inspections were performed at 30 construction sites (of which 28 were active at some time during 2011). There were 27 full inspections and 67 reconnaissance inspections. The inspections resulted in the following actions:

Enforcement Action	Number
Verbal Warning	1
Notice of Non-Compliance	5
Cease & Desist	0
Stop Work Order	0
Notice of Violation & Enforcement Action w/ fine	2

The two Notices of Violation & Enforcement Actions resulted in \$750.00 in fines. A detailed tracking system is in place to assess the number and nature of inspections and actions and to identify repeat violators. There was one repeat violator in 2011; enforcement actions taken escalated from Notice of Non-Compliance to Notice of Violation & Enforcement Action with accompanying fines. A database was created in CarteGraph in 2011 to track DESC permits and inspections. Another was created to track all enforcement actions.

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. Workshops are held when there is sufficient demand.

## **2012 Goals for Construction Site Runoff Control**

1. Cross-training between the stormwater technicians on construction inspection techniques.
2. Update of the GESC Manual to reflect changes in the updated UDFCD Volume 3.

## **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 2012.

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. Eight new permanent BMPs were implemented during 2011. Three were new detention basins, four were storm water vaults and one was a grass swale. One municipal stormwater vault was replaced with an upgraded model. Three detention basins were removed from inspections as they are outside of the City limits and the easement agreement had expired.

6. **Monitor long-term compliance:** One hundred twelve (112) permanent BMPs are inspected 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 2011, a total of 170

inspections were performed on permanent BMPs. Fifty letters were sent out indicating some level of non-compliance (i.e. needing maintenance) and 17 letters of commendation were sent. The following table shows the breakdown of the inspections.

	Private			Municipal		
	Basins	Storm Vaults	Other BMPs	Basins	Storm Vaults	Other BMPs
<b>Annual</b>	52	10	14	27	8	1
<b>Re-inspection</b>	43	3	8	3	1	0
<b>Post-Storm</b>	1	0	0	0	0	0
<b>Complaint</b>	0	0	0	0	0	0

## 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:

1. **Implementation of an O & M program:** All municipally owned facilities (including parks) are inspected annually. The results of the inspections are presented to the appropriate department heads for compliance. Follow-up inspections are done to insure required maintenance is completed. In 2011, 42 facilities were inspected. Two were re-inspected. In addition to the facilities, drainage channels, including those under private custodianship, are inspected as is storm sewer infrastructure such as inlets and culverts.

Drainage Channel Inspection results: Sixty-three channels under the custodianship of the City of Cañon City were inspected and 23 under private custodianship were inspected during 2011. The chart below shows the breakdown for inspection types.

	Private	Municipal
<b>Annual</b>	23	63
<b>Re-inspection</b>	1	2
<b>Complaint</b>	0	0
<b>Monitoring</b>	0	1

Routine maintenance (i.e. mowing, trash clean-up) was performed on 14 of the municipal channels during 2011.

Stormdrain inlet inspections: A total of 950 inlets have been identified and mapped to date. Of these, 613 are under municipal jurisdiction, 33 are under county/state/federal jurisdiction and 304 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. The breakdown for each category as well as the number mapped during 2011 (new and previously identified but unmapped) is detailed in the following table.

Category	Total Number	Number Mapped in 2011
Irrigation Clean-out	191	157
Overflow	15	7
Storm Clean-out	22	10
Storm Inlet	722	224

There were 713 inlet inspections done during 2011, mostly in conjunction with mapping of the storm sewer infrastructure. Irrigation clean-outs and overflows are only mapped when they are designed or have the potential to also receive stormwater runoff. The following table shows the inspections done per category of inlet. The 9 inlets under “Mapping Only” are under State jurisdiction and will not be inspected annually.

Category	Annual Inspections	Complaint Inspections	Illicit Discharge	Mapping Only	Re-inspections
Irrigation Clean-out	184	0	0	0	0
Overflow	14	0	0	0	0
Storm Clean-out	21	0	0	0	0
Storm Inlet	477	2	1	9	5

Other infrastructure: Databases were designed in CarteGraph to track other stormwater infrastructure such as storm pipes, culverts and storm manholes. There are 144 storm manholes of which 34 were mapped during 2011. There is 1 previously identified manhole which still needs to be mapped. Of the 501 culverts previously identified 234 were mapped during 2011. All culverts will be assigned to a primary category in CarteGraph much like inlets and outfalls. The culvert database will not include driveway culverts.

Repair, maintenance and installation of stormwater infrastructure completed during 2011:

- Storm inlets were removed at N. 10<sup>th</sup> Street and Whipple Ave. during street construction over the Hydraulic Ditch which eliminated a cross-connection.
- New storm sewer infrastructure was installed on Fremont Dr., Greydene Ave. and Del Rey Ave.
- New storm sewer infrastructure was installed on Central Ave., Cottonwood Ave. and Cone Ave.
- New culvert was installed under Cone Ave. which drains to the Glenfield Meadows detention basin.
- The Mile High Youth Corps removed brush and debris from the Mud Gulch drainage channel and sediment and debris from the Fremont Dr. drainage channel.
- The storm water vault in the parking lot on the north side of the Arkansas River at Centennial Park was replaced with a new NyloPlast Snout water quality vault.
- New storm sewer infrastructure was installed along Riverside Ave. at S. 1<sup>st</sup> Street and Bennett Ave.
- The culvert at the Plum Street drainage was repaired.
- The Colburn Lane culvert was extended.
- A new NyloPlast Snout water quality vault was installed on the south side of the Arkansas River at Riverside Ave. and S. 2<sup>nd</sup> Street.
- An inlet and drainage channel to the Kelly Strip ditch was reconstructed on N. 5<sup>th</sup> Street.
- Culvert work was begun on the Forked Gulch drainage channel at the Arkansas River in conjunction with the Riverwalk extension.

- The Public Works Street Department obtained a vacuum truck in 2010. Inlets and culverts are cleaned on a rotating basis and as needed when found by inspections or complaints.

2. **Employee training:** Training on the Pollution Prevention Manual for new employees took place on July 13<sup>th</sup>. There were 3 Parks employees and 4 Public Works employees in attendance.

#### **2011 Goals for Pollution Prevention/Good Housekeeping For Municipal Operations**

1. Complete database inventory and mapping of all inlets, manholes, culverts and storm pipes.

#### **Other Trainings**

1. Colorado Water Council Water Quality Workshop in January.
2. Urban Drainage and Flood Control District Annual Seminar in April.
3. EPA Stormwater Enforcement Webinar in April.
4. Environmental Crimes Enforcement Task Force Training in May.
5. Colorado Stormwater Council 1<sup>st</sup> Annual Conference in August.