

2022 Stormwater Program Annual Review

CITY OF CAÑON CITY



PREPARED BY CITY OF CAÑON CITY
STORMWATER PROGRAM



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CITY OF CAÑON CITY

Stormwater

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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), also known as the Phase II General Stormwater Permit. This permit was renewed in 2008, with little to no change. On April 15, 2016, CDPHE issued a revised permit. This permit became effective on July 1, 2016 and is currently under administrative extension. The revised permit has a slightly different structure from the previous permits and contained several new requirements with compliance deadlines to meet. Although the permit structure varies from the previous permit, the areas which must be addressed to minimize potential pollutants remain. An additional requirement of a Program Description Document is also included in the revised permit.

The Phase II General Stormwater permits 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 required the City of Cañon City conduct an annual review of the program to assess the effectiveness of the program elements 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:

- Public Involvement/Participation
- Public Education and Outreach
- Illicit Discharge Detection and Elimination
- Construction Sites
- Post-construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations.

Each of the areas has several program elements which have been used to meet the goals of the Stormwater Management Plan.

This annual review looks at each of these elements to assess the City of Cañon City’s compliance status and the effectiveness of our programs. This report contains a breakdown of activities completed by various City Departments during 2022 to meet the requirements of the current permit.

Supplemental Information

Recordkeeping

In late 2018, the City of Cañon City upgraded its asset management database from Cartegraph Navigator to Cartegraph OMS. The upgrade allows the City to not only track information and inspections on assets as was

previously done, but also allows for a more accurate accounting of tasks and costs associated with those assets. It also assists with documenting citizen contacts and any tasks associated with those contacts. The database was expanded to include City assets other than just Stormwater. Recordkeeping with the OMS database began in 2019 with adjustments to the methods and information tracked continuing in order to provide the best information possible.

Appendix B contains a table of the time and expenses associated with the programs and operations which contribute to meeting our MS4 permit requirements. Only those tasks which are tracked through OMS are listed in the table.

Stormwater Management Plan

Section 1. Program Description Document (PDD)

The PDD is a requirement in the 2016 revised permit. To meet this requirement the City of Cañon City's Stormwater Program must develop and maintain records in the form of a program description document. The PDD must contain a list of citations for documents and electronic records used to comply with the requirements of the permit. It must contain a current organizational chart and citations for the most recent version of documents, the date of the document and the location where the documents are kept. The PDD is a fluid document, kept up-to-date as program elements are modified to meet permit requirements and compliance dates.

The PDD for the City of Cañon City's Stormwater Program was initially completed on December 11, 2018. A statement was posted to the Stormwater webpages on the City of Cañon City's website stating:

“PUBLIC NOTICE:

The City of Cañon City administers a general permit for stormwater discharges associated with Municipal Separate Storm Systems (MS4s) in accordance with Colorado’s Discharge Permit System (CDPS). The City of Cañon City maintains a Program Description Document that is available upon request to the public for review and comment.”

To date there have not been any requests from citizens to review the PDD.

Section 2. Public Involvement/ Participation

The goal of the Public Involvement/ Participation 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 methods. Assessment of effectiveness in this category is a subjective evaluation as it is difficult to directly track the effect each of the elements used to meet this requirement has on public awareness and participation.

The 2016 revised permit clarified the public notice, feedback and recordkeeping requirements. All public notices concerning stormwater are documented in a yearly program documentation spreadsheet maintained by the Stormwater Coordinator. The public can provide feedback through email, in person, via social media and applications, or by phone. Contacts are documented in the Cartegraph OMS Requests database.

Discussion of Elements: All programs listed below were ongoing in 2022, and will continue to be utilized during 2023. These elements are addressed in the PDD.

1. Public Notices: The City of Cañon City complies with the Colorado Sunshine Act for public notice 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 of any public hearing. A notice is also printed in the local newspaper and posted on

social media. Meeting schedules and agendas are posted on the City of Cañon City's website. Digital copies of any public notices concerning stormwater issues are kept in a folder on the Stormwater drive and documented in the yearly annual report spreadsheet.

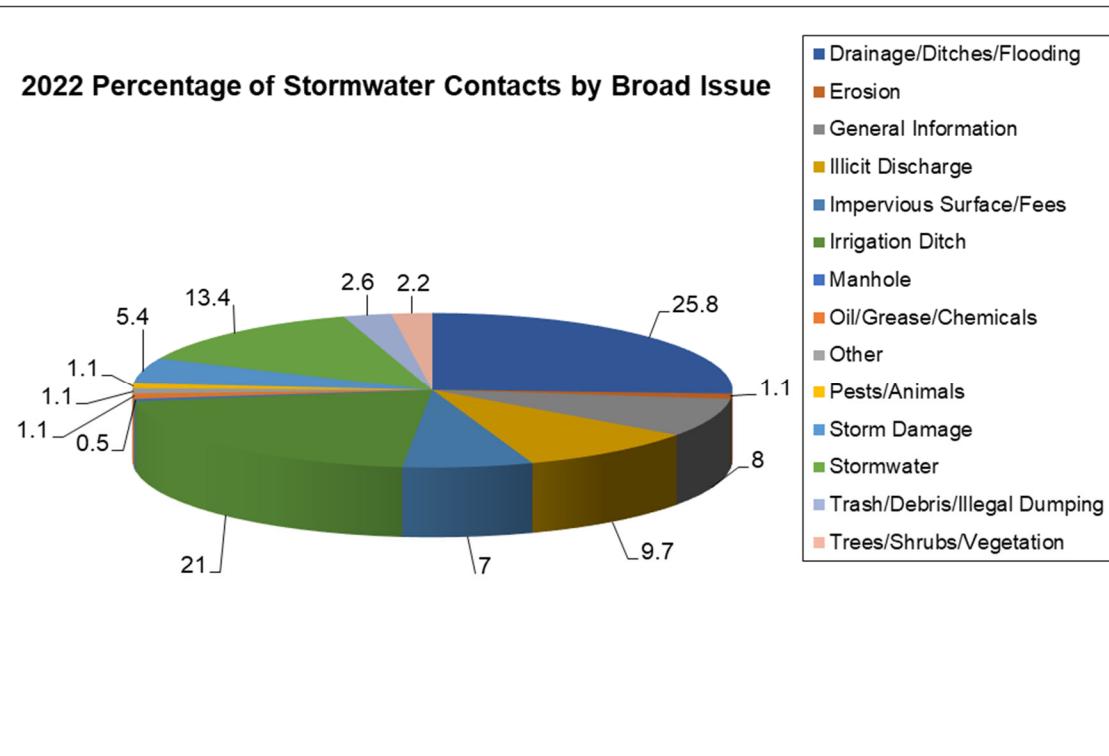
2. Contact Information Availability: Contact information for the City of Cañon City's Stormwater Program is available through the Stormwater Newsletters and on the web page. It is also included in any newspaper articles and public service announcements. All City of Cañon City field staff have the Stormwater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

3. Feedback: The City of Cañon City introduced a web-based application known as SeeClickFix late in 2019. This application allows citizens and City employees to submit concerns they have to City departments on a wide range of City assets and allows City employees to track and address these concerns. SeeClickFix integrates with Cartograph OMS for those departments, such as Stormwater, that use both databases. The Stormwater Newsletters also encourage everyone to get involved by calling, emailing or writing in with their questions, complaints or ideas.

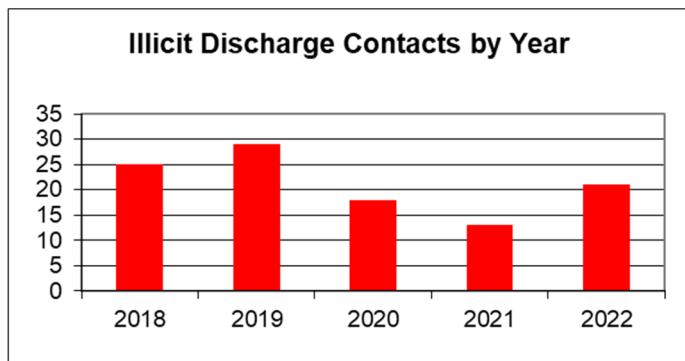
A database is kept of contacts concerning stormwater issues with the intent to better track the effectiveness of the public education and outreach programs, as well as to assist in identifying areas and concerns which may need more public outreach. The database also assists in capital project planning. Contacts are broken into broader categories of issues then further assigned to narrower classifications of issues such as clogged culverts or blocked storm drains to facilitate these decisions. The log represents those contacts handled directly by the Stormwater Coordinator, submitted through SeeClickFix or handled by other departments or staff that the Coordinator is made aware of. During 2022, 198 contacts were taken by the Stormwater Coordinator, other Engineering staff or submitted through SeeClickFix concerning 186 issues (i.e. multiple calls were taken on some issues). Illicit discharges comprised 18 of the contacts. The adjacent table and the following chart show the breakdown of the broader issue categories.

Eleven of the contacts the Stormwater Coordinator handled or that were assigned to the Stormwater Program by SeeClickFix were directed to other departments such as Code Enforcement, Parks or Streets as they did not pertain to stormwater issues. Overall, calls to the Stormwater Program were down slightly from 207 during 2021 to the 198 taken in 2022.

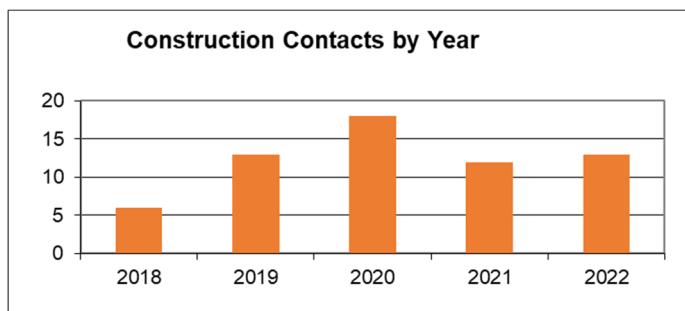
Broad Issue Category	# of Contacts	% of Contacts
Drainage/Ditches/Flooding	48	25.8
Erosion	2	1.1
General Information	15	8
Illicit Discharge	18	9.7
Impervious Surface/Fees	13	7
Irrigation Ditch	39	21
Manhole	1	0.5
Oil/Grease/Chemicals	2	1.1
Other	2	1.1
Pests/Animals	2	1.1
Storm Damage	10	5.4
Stormwater	25	13.4
Trash/Debris/Illegal Dumping	5	2.6
Trees/Shrubs/Vegetation	4	2.2



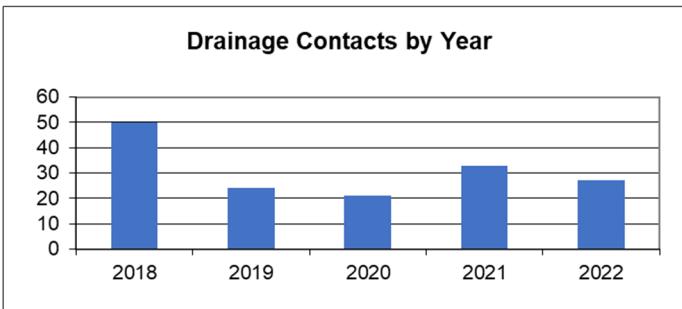
The OMS database allows for tracking trends in the amount of calls received each year for each category. The following graphs show the contacts for some of the categories for the last five years. Variability in categories may be attributed to better tracking of the contacts, training of municipal employees, public education and outreach efforts and general variability of issues throughout the year.



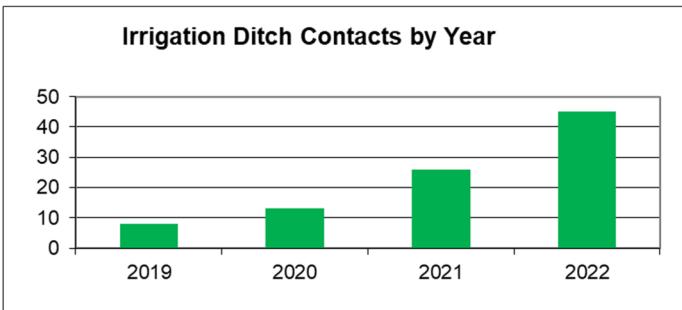
The amount of illicit discharge contacts has varied in the last five years. Variability is influenced by the number of actual illicit discharges which occurred, community awareness and municipal employee training. (See Section 4 *Illicit Discharge Detection and Elimination* for a more complete discussion.)



Construction calls also show variability over the years, mostly due to the amount and type of construction occurring during the year. These types of calls include both complaints about construction and requests for construction-related stormwater information.



Drainage calls vary yearly. This could be due to the amount of precipitation received during the year. For example: significant storms occurred in July, 2018 with subsequent years being much drier.



A new broad category of “Irrigation Ditch” was added in 2019. Calls concerning irrigation ditches and laterals were rolled into the Drainage category prior to then. Although the City and various ditch companies assign the responsibility of maintaining the irrigation laterals between the center of the road and the property line to the private property owner or resident, the Stormwater Program receives a number of calls each year concerning plugged laterals causing overflows onto City streets or

irrigation water users not receiving their shares. Stormwater or Streets personnel often try to assist in resolving the issues.

Statistical analysis of the data is not done, but the graphs generated from tracking contacts show general trends. Overall, it appears that the Public Outreach efforts of the Stormwater Program have been successful in increasing awareness of stormwater issues and in providing an avenue for the citizens and employees of Cañon City to participate in the program.

The database also facilitates tracking of other aspects, such as how the contact was made and how the contact information for the Stormwater Program was obtained, in order to determine how effective our outreach efforts are. During 2022, the primary method of contact continued to be by phone, followed by the SeeClickFix app and “in-person” visits. The method of obtaining stormwater contact information primarily was through prior contacts, then via the receptionist and through the internet/social media. The charts below show the breakdown of each. The method of contact is not consistently tracked (i.e. people are not consistently asked how they obtained the information). This is an area that has strengthened, but still needs to be pursued more diligently.

Mode of Contact	Number	%
Email	16	8.6
In Person	25	13.4
Phone	111	59.7
SeeClickFix	30	16.1
Social Media	2	1.1
Text	2	1.1

How Contact information was Obtained	Number	%
Business Card	1	0.5
Inspection Letter	3	1.6
Internet/Social Media	34	18.3
Newsletter	1	0.5
Other	1	0.5
Personal Contact	11	5.9
Prior Contact	45	24.2
Receptionist	39	21
Referral	11	5.9
Training	30	16.2
Unknown	10	5.4

The OMS database maps the locations of received requests, which then can be exported to analyze which areas may need extra outreach and to assist in prioritizing infrastructure maintenance and capital projects.

With the upgrade to the OMS database, tasks can now be assigned to specific requests which allows various City departments to track labor and material costs associated with those requests. The data can also be analyzed to see how long tasks associated with the requests took to complete and the amount of time for the request to be closed. In 2022, 132 tasks were entered into the OMS database associated with requests (excluding those associated with illicit discharges). Of those, 96 tasks were investigations or inspections; the rest were a combination of debris removal, grading, enforcement actions and other miscellaneous tasks. Illicit discharge tasks will be discussed in Section 4.

Section 3. 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 the effectiveness of the program elements in this category is a subjective evaluation as it is difficult to directly track the effect each of these measures has on public awareness, participation and behavioral changes.

The revised permit lists the following requirements:

1) The permittee must implement a public education program to promote behavior change by the public to reduce pollutants in discharges from the MS4. Education and outreach activities, individually or as a whole, must address the impacts of stormwater discharges on water bodies, the steps the target audience can take to reduce pollutants in stormwater runoff, and water quality impacts associated with illicit discharges and improper disposal of waste.

2) The permittee must provide information to businesses and the general public regarding the permittee's prohibitions of and the water quality impacts associated with illicit discharges as part of the public education program. The information must include the following:

A) The permittee must determine the targeted businesses that are likely to cause an illicit discharge or improperly dispose of waste. At a minimum, the permittee must identify at least one type of business and a list of those businesses that fit the identified type of business.

B) The permittee must develop and implement at least one education and outreach activity to those businesses identified. Educational materials and activities, individually or as a whole, must describe water quality impacts associated with illicit discharges and the improper disposal of waste, the behaviors of concern, and actions that the business can take to reduce the likelihood of illicit discharges and the improper disposal of waste.

3) The permit provides a table of education and outreach activities that the permittee must choose from to implement during the year. At least four from the table must be implemented each year with at least two of those from the Active and Interactive choices. Activities can vary from year to year as long as at least four are done.

4) As part of their public education program, the permittee must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus (nutrients) in discharges from the MS4.

A) The permittee must determine the targeted sources that are contributing to, or have the potential to contribute, nutrients to the MS4's receiving waters.

B) The permittee must prioritize which targeted sources are likely to obtain a reduction in nutrient discharges through education and must distribute educational materials or equivalent outreach to these. The educational materials or outreach must describe stormwater quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nutrients.

The permit also details the types of written procedures, documentation and recordkeeping required to meet these requirements.

The following elements were used to meet our permit requirements during 2022.

Discussion of Elements:

1. Illicit Discharge Education to Businesses and the Public:

A) In 2018, the Stormwater Program determined that construction contractors, restaurants and window washers should be targeted as likely sources of illicit discharges or improper disposal of waste. Lists of individual businesses were created and updated as needed.

Due to an incident involving a food truck vendor in 2022, food cart/truck vendors were added to the list as a likely source of illicit discharges and improper disposal of waste. A fact sheet was developed and distributed to 7 vendors by the Stormwater Coordinator. An additional 25 fact sheets were given to the Royal Gorge Chamber of Commerce for distribution during the Whitewater Festival. The fact sheet was also incorporated into the application packet each food vendor must submit to be licensed to operate within the City of Cañon City's limits. The fact sheet describes what illicit discharges are and provides tips for pollution prevention in regards to the operation of a food cart or truck. It also describes the types of enforcement which may occur for illicit discharges. The fact sheet and vendor list are contained in Appendix A. A spreadsheet is maintained listing those vendors which personally receive the fact sheet. The Planning Director also provides a list of those vendors which have received or renewed their license and received the fact sheet through that process.

B) The Stormwater Newsletters and radio PSAs often address the issue of illicit discharges. Both are disseminated or directed to businesses as well as the general public. The newsletters and PSAs also provide tips for preventing contamination of stormwater runoff. The Stormwater Program webpages on the Cañon City website contain a section on what businesses can do to minimize and/or prevent contamination of stormwater runoff.

C) During 2022, outreach was targeted to all active local construction site managers, including single family residential sites. A construction BMP fact sheet was emailed to 13 construction companies and 1 landscaping company. See Appendix A for the fact sheet.

2. Educational Materials and Activities (from the provided table in the permit): The 2016 revised permit contains a table of the Education and Outreach Activities which must be used to meet the permit requirement. The table contains both Passive Outreach and Active/Interactive Outreach. The permittee must implement *at least* four activities each year and at least two have to be from the Active/Interactive column. The activities can vary each year as long as they meet the requirements. The City of Cañon City's past and current activities are in accord with the activities contained in this table. As a whole, the activities address the impacts of stormwater discharges on our receiving waters and steps the general public and businesses can take to reduce their impact on stormwater runoff and thereby our local waterways. The following programs were utilized during 2022.

i. Passive Outreach:

A. **Radio/television/movie theater advertisement:** During 2022, 10 different 30-second public service announcements concerning stormwater were aired on local radio stations for a total air time of 509 minutes (8.48 hours). Six new ads were developed during 2022. Radio public service announcements are rotated throughout the year. Newspaper notices and radio PSAs which include stormwater information were also run in conjunction with the leaf pick-up program. Five stormwater/water-related programs were run on CCTV-Channel 19 with a total air time of 168.8 hours.

B. Distribute educational materials by brochure: Several types of brochures are given out during events at which the Stormwater Program has a booth. See further discussion under Section 3.2.ii.G.

C. Distribute educational materials by fact sheet: Several types of fact sheets are given out during events at which the Stormwater Program has a booth. See further discussion under Section 3.2.ii.G. Food cart/truck vendor fact sheets were developed and distributed in 2022. See discussion under Section 3.1.A.

D. Distribute educational material by utility bill insert: The Stormwater newsletters are sent out as a utility bill insert and contain educational material. See Section 3.2.ii.E for further discussion.

E. Publish an article (hard copy or electronic): Although the Stormwater Program did not author any articles for publication an article was published in the Cañon City Daily Record about the revisions to Title 20.10.160.E. Stormwater Enforcement.

F. Stormwater related signage: The City of Cañon City does have stormwater related signage as well as pet waste stations. A total of 107 pet waste educational and regulation signage and pet waste stations, as well as stormwater educational signage were mapped and added to the OMS database during 2022. The following table lists the types and numbers of signage and waste stations.

Type of Signage/Station	Number
Pet Waste Educational Signage	55
Pet Waste Signs	4
Pet Waste Station Indicator Signs	3
Park Trailhead Signs which include pet waste regulations	6
Pet Waste Stations	38
Stormwater Educational Signage	1



G. Website: The City of Cañon City's Stormwater webpages contain information for the public ranging from informational brochures about water quality, illicit discharges and construction stormwater runoff control to children's activity booklets. Current editions of the newsletters, the annual program review, and other content were added or updated during 2022. Additionally, various announcements or articles were posted under the City News section. Visits to the stormwater webpages are tracked via monthly reports. From January through December, 2022, 194 entrances into the webpages were recorded.

ii. Active and Interactive Outreach

A. Ongoing advertisement/promotion of a stormwater hotline number or other method to report an illicit discharge: Contact information is provided in each of the Stormwater Newsletters, on the public service announcements aired by radio and on the City's website. With the implementation of the SeeClickFix application, the public can now report issues via their phone or computer. Reports entered into the application are automatically assigned to a City department and an email notification is sent to the contact person for that department.

B. Ongoing advertisement/promotion on how to get more information about the stormwater program: Contact information is provided in each of the Stormwater Newsletters, on the public service announcements aired by radio and on the City's website as well as the City's social media sites.

C. Ongoing social media program: The City of Cañon City has a Facebook page and Twitter account. Forty-three stormwater-related posts were included on the City's social media pages during 2022. The posts covered a wide range of topics including pollution prevention information.

D. Web site that is interactive or contains stormwater information that includes actions that can be taken to reduce stormwater pollution: The City of Cañon City's Stormwater webpages contain information for the public ranging from informational brochures about water quality, illicit discharges and construction stormwater runoff control to children's activity booklets. Information about what citizens and businesses can do to lessen their impact on stormwater runoff is found under the "What Can I Do To Help?" link.

E. Newsletter (hard copy or electronic): Stormwater Newsletters are sent out with City water bills and are available on the City of Cañon City's website. Each newsletter 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 Stormwater Program's contact information). During 2022, 20,406 newsletters were sent to residents and 2,547 newsletters were sent to commercial establishments. Residents and businesses that receive their water bill via email also receive the stormwater newsletter by email. A total of 3,179 newsletters were emailed throughout the year. The 2022 newsletters are included in Appendix A.

F. Promotion of existing local stormwater/environmental events or program that help protect water quality: The City of Cañon City promoted its Stormwater Program and various events through social media and the City's website. The City also promoted municipal, private and non-profit clean up events, as well as the City Streets Department's annual fall leaf pick-up program.

G. Distribute promotional items or giveaways: Reusable litter bags, pet waste dispensers, crayon boxes and Cañon City Stormwater Program magnets were given out during in-person events which occurred in 2022. Litter bags and pet waste baggie dispensers were available in a display during National Pollution Prevention week. Brochures, activity booklets and other items given out during events are tracked in a yearly spreadsheet as per permit record-keeping requirements. The following table shows the breakdown of the types of items given out.



Litter Bag



Pet Waste Baggie Dispenser



Magnet

Type of Giveaway	Number Given Out
Brochures and flyers	44
Activity Booklets	207
Cañon City Stormwater Program Magnets	133
Biodegradable Reusable Litter Bags	142
Pet Waste Baggie Dispensers	231
Crayons with Cañon City Stormwater Logo	102

H. Participate in or sponsor a waterway clean-up and trash removal event:

1. The City of Cañon City co-sponsored and participated in the Cañon City Metro Recreational District's annual Clean Up/Green Up Arkansas River and Riverwalk trash removal event in 2022. A total of 680 pounds of trash were removed by the 33 volunteers that participated in the event.
2. The City of Cañon City also participated in a river clean-up organized by the Royal Gorge RIO and provided snacks and a stormwater booth for the event. Over 42 miles of the Arkansas River were floated or walked by 67 volunteers, removing 1,811 pounds of trash and debris.



I. Participate in or sponsor a stormwater or environmental presentation: A presentation was given by the Stormwater Program for the Cañon City Library Summer Learning Program. A stormwater demonstration was given using the EnviroScape and the children were able to diatoms in water through a microscope following a demonstration of an algae experiment. Thirty-six children and adults attended the presentation and received activity books, crayons, litter bags and magnets. One other presentation for the Arkansas Basin Roundtable PEPO meeting was prepared but not given due to miscommunication.

J. Participate in or sponsor a stormwater or environmental event: The City held a Cañon Proud clean-up event in March. The Stormwater Program had a table with information and giveaways at the starting area and City personnel participated in the clean-up. An area was set up for additional electronics

recycling and dumpsters for large item drop-offs. Approximately 50 volunteers participated, breaking into groups to clean-up different areas of the city.



K. Participate in or sponsor community project based programs that investigate watershed health and meet applicable school Science, Technology, Engineering and Math (STEM) standards: The Stormwater Program participates in the bi-annual Teaching Environment Naturally (TEN) course for Fremont County teachers. Planning sessions occurred in 2022, however, the course was cancelled due to lack of registrations.

L. Stormwater booth at a community event: The Stormwater Program had informational booths with giveaways at the Cañon Proud clean-up event and the Clean Up/Green Up event. A booth was also set up with giveaways and demonstrations during the RIO River Clean Up event and the City of Cañon City's 150th Jubilee Celebration. At least 372 people visited the Stormwater Booth at the Jubilee Celebration and 47 demonstrations were done with the EnviroScape. Twenty-two people visited the booth at the RIO River Clean Up event and 4 EnviroScape demonstrations were done. Outreach giveaways are discussed in Section 3.2.ii.G. of this report.

M. Pet waste stations: The Cañon City Parks Department provides pet waste stations with bags, trash cans and signage at all City parks, along the Riverwalk and along the Hogback and Tunnel Drive Trails. Pet waste stations have also been added to the trail network in the Dawson Ranch Subdivision. See the discussion under Section 3.2.i.F. for a list of signage and pet waste stations.



3. Nutrients: The revised 2016 permit has the additional requirements of determining targeted sources that are contributing to, or have the potential to contribute nutrients to our receiving waters and to distribute educational materials or equivalent outreach to prioritized target audiences.

- A) Targeted sources of nutrients have been determined to be fertilizers, pet/animal waste and yard waste.
- B) Information about nutrient impacts is included in most of the Stormwater Program's brochures, presentations and PSAs. The 2nd and 3rd Quarter Stormwater Newsletters contained tips for preventing nutrient pollution.

Section 4. Illicit Discharge Detection and Elimination

The 2016 MS4 permit clarifies the requirements for illicit discharge detection and elimination including more detailed requirements on regulatory mechanisms, tracing and removing a discharge, enforcement responses, priority areas and training. Recordkeeping is also clarified.

The City of Cañon City's Illicit Discharge Detection and Elimination (IDDE) program identifies sources of potential illegal discharges and actual 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 are important elements in this program. Inspections of the storm sewer discharge pipes (outfalls) on the Arkansas River, Four Mile Creek and various drainages throughout the City, as well as water quality testing if discharges are found are integral parts of the program.

Discussion of Elements: All programs listed were ongoing in 2022 and will continue during 2023.

1. Storm Sewer System Map: The revised permit requires the permittee to maintain a current map of the location of all MS4 outfalls within the permit boundary. The City of Cañon City maintains a map of all storm sewer infrastructure including storm drains, pipes, culverts, manholes and outfalls in ArcMap and through the Cartograph OMS database. Outfall inspections and mapping of new outfalls continued during 2022. Outfalls are assigned to a category in the Cartograph 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 and numbers of outfalls are listed in the table below. 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 permanent stormwater control measures such as detention basins empty to areas other than a waterbody. Facility outlets are the point at which a municipal facility discharges to the storm sewer system (including a street). This category was added in 2016 in preparation for the new permit requirements. Footing/Foundation and Roof Drains are only mapped if they discharge directly to a drainage or waterbody.

The Cañon City Stormwater Program has mapped a total of 578 active outfalls, outlets and other drainage end points located along the Arkansas River, Four Mile Creek and the various drainages and irrigation ditches throughout the City. The City of Cañon City has jurisdiction over 263 of them; County or State Agencies have jurisdiction for 25 and 290 are under private jurisdiction. The breakdown for each category is detailed in the following table. Nineteen outfalls (either new or existing but un-mapped) were added during 2022.

Category	Total Number
Facility Outlet	21
Footing/Foundation Drain	61
Groundwater Drain	35
Industrial Discharge	4
Irrigation Return	153
Major Outfall	26
Outfall	194
Outlet	32
Roof Drain	52

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 permanent stormwater control measures and facilities. Outfalls and major outfalls are inspected annually (time permitting). The outfall database in Cartograph and the mapping assist in prioritizing inspections of the outfalls. During 2022, 216 inspections were conducted: 206 were routine inspections, 9 were initial inspections and 1 was conducted in response to a complaint.

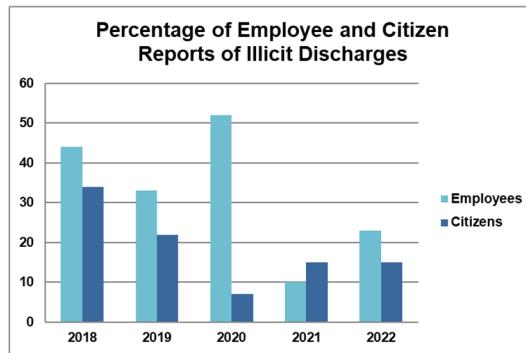
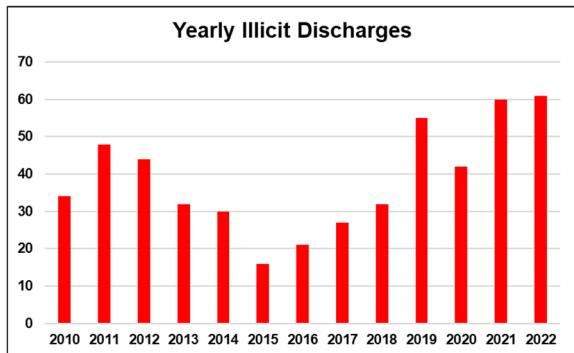
2. Regulatory Mechanism: The City of Cañon City adopted Ordinance No. 20, Series of 2005 to establish codes concerning illicit discharges. Some minor changes were made to the Ordinance, effective September 9, 2012 through Ordinance No. 14, Series of 2012 AN ORDINANCE MAKING CERTAIN MINOR AMENDMENTS TO THE CITY'S STORMWATER REGULATIONS. In 2019, the Stormwater Regulations were moved to a new section of municipal code: Title 20 Stormwater Illicit Discharges and Permits (Ordinance No. 12, Series of 2019). Some minor corrections and/or additions were made at that time. The Ordinance can be viewed on the City of Cañon City's website at www.canoncity.org. During 2022, revisions to Title 20.10.160.E were proposed and adopted by City Council. Ordinance 18, Series 2022 entitled "An Ordinance of the City of Cañon City Amending Chapter 20.10 of the Cañon City Municipal Code Concerning Notice of Violation and Penalty Assessment for Stormwater Violations" allows City personnel to move straight to assessing penalties in cases of egregious violations or chronic violators.

3. Tracing an Illicit Discharge: The revised permit requires the permittee to implement procedures to respond to reports or identifications of illicit discharges. The procedures and tools needed to trace the illicit discharge must be documented. The City of Cañon City had previously implemented an Illicit Discharge Detection and Elimination Manual (IDDE Manual) which documented the required procedures and tools. The manual was reviewed and revised in 2017 to ensure consistency with the permit requirements and again in 2019 in keeping with the municipal code Title changes. The full manual may be viewed at: <https://www.canoncity.org/DocumentCenter/View/235/Illicit-Discharge-Detection-and-Elimination-Manual-PDF>.

4. Removing an Illicit Discharge: The permit requires that the permittee must have written procedures requiring the cessation and removal of illicit discharges, including removal of any surface residue and pollutant sources. The IDDE Manual contains these procedures.

i. Discussion of the Illicit Discharge Program

Sixty-one incidents of potential or actual illicit discharges were investigated during 2022, resulting in 139 initial and follow-up inspections. Of the 61 reported or discovered discharges 1 was an excluded discharge, 4 were potential discharges and the rest were prohibited discharges. Reported discharges had declined between 2011 and 2015 then rose again. The increase in illicit discharges since 2015 may be due to better awareness and reporting of potential illicit discharges. The significant increase in illicit discharges from 2019 through 2022 is mainly due to increased oversight and enforcement on single family residential construction sites. The following graph on the left portrays the trend. The Request database in Cartograph assists in tracking how many reports of illicit discharges the Stormwater Program receives from citizens and employees (*See Section 2. Public Participation/Involvement*). The following graph on the right shows the reports received from citizens and employees as a percentage of the total number of reported illicit discharges each year for the last 5 years.



Illicit discharges are assigned a category in the Cartograph database to assist in identifying types of pollutants which may need targeting through our Public Education program. The following table shows how many discharges were reported or discovered for each category during 2022. The database in Cartograph allows for comparisons between categories each year which enables staff to see trends and adjust outreach accordingly.

Category	Reports	Category	Reports
Accident	0	Illicit Connection	1
Automotive Discharge	8	Leaking Dumpster	0
Blocked Flowlines	1	Non-hazardous Spill	0
Construction – Concrete Washout	5	Other	2
Construction – No BMPs	1	Pesticide/Herbicide/Fertilizer	0
Construction – Other	3	Pet Waste	0
Construction – Sediment Release	24	Power Washing	3
Hazardous Spill	1	Prohibited Discharges – Other	1
Illegal Dumping – Drainage	0	Restaurant Oil/Grease	0
Illegal Dumping – Flowline	0	Sediment	4
Illegal Dumping – Inlet	1	Sewage	1
Illegal Dumping – Other Area	1	Yard Waste	4
Illegal Dumping – Waterbody	0		

Water quality sampling is done when needed to assist in determining the source of the discharge. One sampling event occurred during 2022 in response to a citizen's request to assist in determining the source of water flooding their house and yard. Based on testing the source was determined to most likely be overflow from an irrigation lateral adjacent to the property. Benthic macroinvertebrate sampling of the Arkansas River and Four Mile Creek was not conducted in 2022 due to time and budgetary constraints.

5. Enforcement Response: The revised permit requires that the permittee must implement written enforcement procedures and actions to eliminate the source of the illicit discharge when identified or reported, discourage responsible parties from willfully or negligently repeating or continuing illicit discharges and discourage future illicit discharges from occurring. The IDDE Manual contains these procedures which the Municipal Code allows for.

i. Discussion of Enforcement Responses

Investigations resulted in the illicit discharge enforcement measures shown in the following table. The majority of enforcement actions were due to sediment tracking from single-family residential construction sites. Single-family residential construction lots typically fall under the one-acre or more size requirement of the CDPHE's Construction Stormwater Permit and the City of Cañon City's GESC permit, and as such, discharges are handled through the City's Illicit Discharge program. One letter of violation was issued which resulted in \$499.00 fine for City abatement costs.

Enforcement Action	Number
Verbal Warning	46
Notice of Non-Compliance	0
Notice of Violation & Enforcement Action w/ fine	1
Stop Work Order	0
Letters detailing violation/corrective action	1

The database in Cartograph facilitates tracking of other aspects of illicit discharge reports and investigations such as repeat violators. Six parties had multiple violations during the year, all but one residential construction companies. The seventh party with more than one violation was a landscaping company. The Cartograph OMS database also maps the locations of illicit discharges to show areas which may need extra outreach or monitoring.

6. Priority Areas: The permit requires that the permittee must locate priority areas with a higher likelihood of having illicit discharges. The database and mapping of illicit discharges assist in determining areas of past illicit discharges and areas where illicit discharges are concentrated. Land use is also taken into account when determining priority areas. Using these criteria, which are documented in the IDDE Manual, the following areas have been deemed priority areas for the City of Cañon City:

- NW Cañon from 2nd Street to 9th Street; Main Street to Pine Ave
- Businesses along the Water Street Channel from Rainbow Drive to 12th Street
- Businesses along Fremont Drive and East Main Street

Review of illicit discharges during 2022 did not result in a change of the priority areas.

7. Training: Training must be held for applicable municipal staff so they may recognize and appropriately respond to illicit discharges observed during typical duties. A video training was created in December, 2020, which all applicable employees hired after July 2019, are required to complete. Fifteen employees completed the on-line training and passed the exam in 2022.

Section 5. Construction Sites

The Construction Sites elements of our Stormwater Management Program are 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. The revised permit contains new and clarified requirements which were implemented prior to the July 1, 2019 compliance date.

Discussion of Elements: All programs listed were ongoing during 2022.

1. Regulatory, Compliance and Exemption 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. 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. In 2019, the Stormwater Regulations were moved to a new section of municipal code: Title 20 Stormwater Illicit Discharges and Permits (Ordinance No. 12, Series of 2019). Some minor corrections and/or additions were made at that time. During 2022, revisions to Title 20.10.160.E were proposed and adopted by City Council. Ordinance 18, Series 2022 entitled "An Ordinance of the City of Cañon City Amending Chapter 20.10 of the Cañon City Municipal Code Concerning Notice of Violation and Penalty Assessment for Stormwater Violations" allows City personnel to move straight to assessing penalties in cases of egregious violations or chronic violators. The Municipal Code can be viewed on the City of Cañon City's website at www.canoncity.org. The City of Cañon City's GESC manual was reviewed and revised to ensure compliance with the new and updated requirements in

the revised 2016 MS4 Stormwater Discharge Permit. City Council approved the revisions on June 17, 2019 (Resolution No. 18, Series 2019).

2. Control Measure Requirements: The City Municipal Code requires the implementation of stormwater control measures on all applicable construction sites. The City's GESC manual provides guidance for construction site operators on that implementation.

3. Site Plan Review: The procedures for site plan review are addressed through the City of Cañon City's Grading, Erosion and Sediment Control Manual. The Director of Public Works reviews all site plans prior to approval and issuance of any permits for construction within our permit boundaries.

4. Procedures for Receipt and Consideration of Information Submitted by the Public: A database is kept of all contacts concerning stormwater issues with the intent to better track the effectiveness of the public education and participation programs. (*See Section 2. Public Participation/Involvement*). All complaints and concerns are addressed promptly. Any illicit discharge or construction investigations resulting from a complaint or concern submitted by a citizen is logged into the database in Cartegraph and can be cross-referenced through the Request database.

5. Site Inspections and Enforcement of Control Measures: Inspections are performed at all applicable construction and post-construction sites as per the schedule provided in the 2016 revised MS4 permit. Appropriate enforcement actions are taken when needed. During 2022, there were 15 open Grading, Erosion and Sediment Control (GESC) permits and 9 open Drainage, Erosion and Sediment Control (DESC) permits. Ten of the GESC permits and 3 of the DESC permits were issued in 2022. Of the open permits, one of the GESC permits and 5 of the DESC permits were completed and closed during the year. Three of the GESC permits were City construction sites which also had State Construction Stormwater Discharge Permits.

Due to a clarification in the new permit, after July 1, 2016, Drainage, Erosion and Sediment Control (DESC) permits were no longer required for single family residences being built in subdivisions which have been stabilized, however, contractors are encouraged to still apply for the permit to ensure proper control measures and drainage are addressed for the site. The 3 DESC permits were issued during 2022 for single family residences being constructed in a subdivision that has not yet been stabilized. Those single family residential sites which do not require a DESC permit are addressed through the City's Illicit Discharge programs should there be an issue at the site.

The revised 2016 MS4 permit contains more robust inspection requirements, including a time line for conducting routine, reduced and compliance inspections. Recordkeeping requirements are also detailed in the permit. With the upgrade of our database to Cartegraph OMS, City GESC and DESC permits are tracked in the database along with all inspections, associated tasks and enforcement actions. The following tables show the number and type of inspections conducted at permitted construction sites during 2022 and enforcement actions taken. It should be noted that the State Construction Stormwater Discharge permit has a slightly different inspection schedule than the MS4 Stormwater Discharge permit. The 3 City sites which also had a State construction permit were inspected per the State permit's schedule which also served to meet our required MS4 permit inspections.

Inspection Type	Number
Complaint	1
Compliance	17
Initial	7
Other	8
Post-Storm	1
Reduced Frequency-Indicator Inspection	5
Reduced Frequency-Inactive Site	10
Reduced Frequency-Winter Conditions Exclusion	0
Re-inspections	5
Routine	46

Enforcement Action	Number
Verbal Warning	2
Notice of Non-Compliance	3
Stop Work Order	0
Notice of Violation & Enforcement Action w/ fine	1
Letter detailing violation/corrective action	0

The one Notice of Violation resulted in a \$250.00 fine.

6. Training and Education for Construction Site Operators: This is primarily achieved using the GESC manual and through the plan review process. New information and resources are passed to local contractors and developers when available.

A. Regional Stormwater Seminar

Cañon City again joined forces with the City of Pueblo, the Pueblo County Engineering and Public Works Department, the Pueblo West Metro District and Colorado State University-Pueblo (Southern Colorado Stormwater Education Committee) to host a Regional Stormwater Seminar on February 9, 2022. The seminar was geared toward contractors, developers and engineers who work throughout the region, as well as municipal employees. Featured topics and speakers were:

- “Navigating the Future – New Non-Standard MS4 Permit”; Forrest Dykstra, Highlands Ranch Metro District
- “Back to Basics – Construction BMPs”; Andrea Aragon, Steel City Enviro, and Shannon Steiner, Kodiak Development Group
- “Stabilization Takes Planning” – Shannon Steiner, Kodiak Development Group

The seminar was held at CSU-Pueblo and was attended by 59 people, excluding organizers, speakers and vendors. The full report is kept with the MS4 permit documentation for 2022.

B. Additional Construction Outreach

A construction BMP fact sheet was emailed to 13 construction companies and 1 landscaping company. See Appendix A for the fact sheet.

Section 6. Post-construction Stormwater Management in New Development and Redevelopment

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. The revised permit contains new and clarified requirements which were implemented prior to July 1, 2019 compliance date.

Discussion of Elements: All programs listed were ongoing during 2022.

1. Regulatory Mechanisms and Exemptions: Ordinance No. 20, Series of 2005 and the City of Cañon City Grading, Erosion & Sediment Control (GESC) Manual were enacted in 2006. 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. In 2019, the Stormwater Regulations were moved to a new section of municipal code: Title 20 Stormwater Illicit Discharges and Permits (Ordinance No. 12, Series of 2019). Some minor corrections and/or additions were made at that time. The Ordinance can be viewed on the City of Cañon City’s website at www.canoncity.org.

2. Design Criteria & Standards and Review & Approval Procedures: The City of Cañon City's revised Grading, Erosion and Sediment Control (GESC) manual now contains a section on post-construction permanent stormwater control measures design criteria. Additionally, the site plan review process assures that post-construction structural control measures meet design standards. Inspections during the construction process and final inspections assure that the control measure(s) has been properly constructed. The Director of Public Works documents all site plan reviews and approvals. Final as-built drawings are kept with the file for the post-construction permanent control measure. All construction inspections of the control measure are entered into the Cartegraph OMS database for that asset.

3. Recordkeeping/Tracking: Permanent stormwater control measures are recorded, mapped and entered into the Cartegraph OMS database. One new permanent stormwater quality control measure (a sand filter) was implemented in 2022. One grass swale and one grass buffer were converted to PLDs with the Engineering Department's approval due to the inability to maintain vegetation. Procedures for documenting and mapping new permanent control measures are contained in the Stormwater Coordinator's manual. The following table lists the number of active control measures and custodianship for maintenance.

BMP Type	Private/Federal/County/State	Municipal
Detention/Water Quality Basins	60	26
Grass Buffer	1	0
Grass Swale	18	1
Porous Landscape Detention	11	2
Porous Pavement – Gravel	2	0
Rock Berm	2	0
Sand Filter	6	0
Permanent Sedimentation Basin	0	2
Underground Water Quality Structures	20	12

The revised 2016 MS4 permit contained an additional recordkeeping requirement of documenting which applicable development sites were subject to an exclusion and the type of exclusion (allowed by the permit) granted. Exclusions are documented in the Stormwater Construction Permits database in Cartegraph OMS. One exclusion for a "Stream Stabilization Site" (Rhodes Ave channel City project) was granted in 2022.

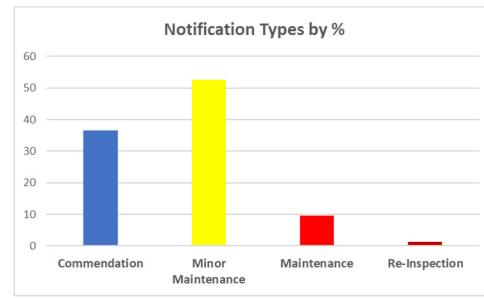
4. Monitor Long-term Compliance with Enforcement Actions: The revised 2016 permit requires that permanent post-construction stormwater control measures be inspected at least once a permit term (5 years) to ensure conformity with the site plan and to identify any inadequate control measures or needed maintenance. Every effort is made to inspect each control measure at least once a year, however, occasionally time constraints prevent a yearly inspection on every one. When time constraints occur, those control measures which have shown a history of needing routine maintenance are prioritized for inspection. The results of inspections are entered into the Cartegraph OMS database.

An inspection report and letter are sent to the custodian of the private control measures. The letters fall into the categories of commendation, maintenance or minor maintenance. Minor maintenance letters are sent for those that need minor, routine maintenance such as trash removal. Recipients of the minor maintenance letters have shown a history of good maintenance and a willingness to respond favorably to past maintenance letters. A follow-up inspection is not done. Maintenance letters are sent for those control measures which need more extensive maintenance. The control measure is then 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. For municipal stormwater control measures, the appropriate department receives the inspection report. Tasks are assigned in Cartegraph OMS to address any issues noted.

During 2022, a total of 184 inspections were performed on permanent stormwater control measures. Courtesy inspections are conducted on City-owned permanent stormwater control measures which are outside of the MS4 Permit Boundary (City Limits).

	Private/County/Federal/State			Municipal		
	Basins	Storm Vaults	Other PSWCMS	Basins	Storm Vaults	Other PSWCMS
Annual	58	18	34	25	9	5
Complaint	0	0	0	0	0	0
Construction	0	0	2	0	0	0
Courtesy	0	0	0	1	3	0
Initial	0	0	0	0	0	0
Maintenance	0	0	0	0	0	0
Other	0	0	0	0	0	0
Re-inspection	1	1	4	0	0	0

One hundred fifty-six notifications were sent to non-municipal custodians indicating some level of non-compliance (e.g. needing maintenance). Of those, 15 were maintenance letters, 82 were minor maintenance letters and 2 were re-inspection letters requiring that the maintenance work be completed. Fifty-seven of the inspections resulted in letters of commendation being sent to non-municipal custodians. The adjacent graph shows the percentages of types of notifications sent out during 2022.



Section 7. Pollution Prevention/Good Housekeeping For Municipal Operations

The focus of this area of the Stormwater 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 revised MS4 permit requires the permittee to implement a program to prevent or reduce water quality impacts from pollutants from facilities and operations that they own, operate or perform *within the permit area*. The permit conditions had a range of compliance dates from July 1, 2017 to July 1, 2021. All requirements with a compliance date were met prior to the compliance date.

Discussion of Elements: All programs listed were ongoing during 2022.

1. Municipal Facility Runoff Control Measures:

- A. The permittee shall implement control measures to prevent or reduce potential discharges of pollutants to the MS4 from the following municipal facilities: vehicle maintenance facilities, asphalt and concrete batch plants which do not have a separate permit, solid-waste transfer stations and outdoor storage yards with exposed stockpiles of materials.
- B. The permittee shall implement the following categories as necessary to prevent or reduce the pollutant sources present: preventative maintenance, good housekeeping, spill prevention and response procedures, structural control measures, evaluation of non-stormwater discharges and employee training.
- C. The permittee shall implement written municipal facility inspection procedures which, at a minimum, must include:
 - An annual visual inspection of each applicable municipal facility
 - Verification that written facility procedures and documentation reflect current conditions
 - Observation of locations and areas where stormwater is discharged from a facility
 - Observation of facility conditions, including pollutant sources and control measures.

The recordkeeping requirements for the above permit requirements include the following for each facility:

- Facility identification
- Description of all pollutant sources
- Control measures implemented
- Staff responsible for implemented control measures
- Description of control measures implemented for bulk storage structures
- Inspection records which contain the following: Inspection date, Inspector, Facility ID, Inspection findings including any evidence of polluted discharges leaving the facility and a list of follow-up actions if needed.

Most of these requirements were already being met through the previous permit's requirements. A Pollution Prevention Operations and Maintenance Manual had been created and implemented on January 1, 2010. The manual was reviewed and revised prior to the July 1, 2017 deadline. The manual was reviewed and revised again in 2020; copies were distributed to all applicable City employees.

A database of all municipal facilities is kept in Cartograph. Currently there are 64 municipal facilities of which 12 are outside of the permit area. All of the required information is tracked in the database, including inspections. The forms in Cartograph have been reviewed and revised to ensure that all required data is recorded. Two new forms were created to address pollutant sources and pollution potential for each facility in 2017. The following table shows the number of facilities under each City department.

Department	Total # of Facilities	# outside of Permit Area
Facilities	2	1
Parks	39	4
Stormwater	7	2
Streets	1	1
Water Distribution	13	4
Water Treatment	2	0

Every effort is made to inspect all municipally owned facilities (including parks) annually. In the event of time constraints, priority is given those facilities which rate higher on the pollution source and pollution potential evaluations. Courtesy inspections are conducted on those facilities outside of the permit area. The results of the inspections are sent to the appropriate department heads. In 2022, 64 inspections were conducted – 53 Annual and 11 Courtesy.

2. Municipal Operations and Maintenance Procedures: The permit requires the implementation of control measures that prevent or reduce discharges from applicable municipal operations (activities). The minimum municipal operations that must be addressed include:

- Operation and maintenance of streets, roads, highways
- Operation and maintenance of municipal parking lots
- Operations at maintenance storage yards
- Operations at maintenance shops with outdoor storage areas
- Operation and maintenance of snow dumps/snow disposal areas
- Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles
- Park and open space maintenance
- Building maintenance
- New construction of municipal facilities

- Application of pesticides, herbicides and fertilizers
- Large outdoor festivals and events
- Municipal construction activities
- Maintenance, replacement and construction of utilities and the storm system

The Pollution Prevention Operations and Maintenance Manual covers each of these areas in detail, providing standard operating procedures for each department in order to reduce or eliminate any pollutants which may be discharged during municipal activities.

The City of Cañon City conducts inspections and maintenance on other stormwater infrastructure such as drainage channels, storm drains, manholes, culverts and pipes. Each type of asset has its own database in Cartegraph in which base data, inspections and tasks are recorded for each individual asset.

i. Drainage Channels: The City of Cañon City has custodianship over 59 drainage channels; 35 are under private custodianship. During 2022, 90 inspections were conducted on channels. The adjacent chart shows the breakdown for inspection types.

Channels	Private	Municipal
Annual	34	52
Complaint	0	4

ii. Storm Drains: Storm drains are mapped and categorized as part of our Stormwater Program. A percentage of those are inspected yearly. A total of 1,181 storm drains have been identified and mapped to date. Of these, 737 are under municipal jurisdiction, 101 are under county/state/federal jurisdiction and 343 are under private jurisdiction. Like outfalls, inlets are assigned to a primary category in the Cartegraph database. The categories are Irrigation, Irrigation Box, Irrigation Clean-out, Overflow, Storm Clean-out and Storm Inlet. Irrigation boxes/clean-outs and overflows are only mapped when they have the potential to also receive stormwater runoff or are connected to pipes under City streets. The breakdown for each category as well as the number mapped during 2022 (new, previously identified but unmapped and rebuilt or moved inlets) is detailed in the following table.

Category	Total Number	Number Mapped in 2022
Irrigation	4	0
Irrigation Box	23	1
Irrigation Clean-out	210	7
Overflow	17	0
Storm Clean-out	45	1
Storm Inlet	882	27

One hundred forty-four inlet inspections were conducted during 2022. The following table shows the inspections done per category of inlet.

Category	Initial	Complaint	Routine
Irrigation	0	0	0
Irrigation Box	0	1	0
Irrigation Clean-out	6	1	9
Overflow	0	1	2
Storm Clean-out	1	0	9
Storm Inlet	0	3	111

iii. Storm Manholes: Storm manholes are also mapped and categorized as part of our Stormwater Program. A percentage of those are inspected yearly. A total of 231 storm manholes have been identified and mapped to date, but data still needs to be collected for many of them. Of these, 186 are under municipal jurisdiction, 14 are under county/state/federal jurisdiction and 31 are under private jurisdiction. Like outfalls and inlets, manholes are assigned to a primary category in the Cartograph database. The breakdown for each category is detailed in the following table.

Category	Total Number	Number Mapped in 2022
Combination Irrigation/Storm	13	0
Dry Well/Clean-out	5	2
Irrigation Clean-out	18	0
Storm Manhole	190	1
Storm Sump Manhole	1	0
Vault Access	1	0
Vault Clean-out	3	0

Seven manhole inspections were conducted during 2022; 5 were routine inspections and 2 were initial inspections.

iv. Culverts: The culverts database currently contains 592 culverts. The City of Cañon City has jurisdiction of 448; 51 are under county/state/federal jurisdiction and 93 are under private jurisdiction. Culverts are divided into two categories based upon the primary type of flow they carry: drainage or irrigation flow. Of the culverts in the database, 420 are classified as drainage and 172 are irrigation. During 2022, 258 routine inspections were conducted on culverts.

v. Pipes: Data entry into the storm pipe database began in 2016. Pipes are assigned to a category based on the primary type of flow they carry. The categories are Groundwater, Irrigation, Non-Potable, Potable, Stormwater, Stormwater Siphon and Waste. Currently the database contains 2,038 pipes. The City of Cañon City has jurisdiction over 961 of the pipes; 175 are under county/state/federal jurisdiction and 902 are under private jurisdiction.

vi. Maintenance: Beginning in January, 2021, the City acquired a new vac truck and created two new full-time positions for the express purpose of cleaning and maintaining our storm sewer system. The Streets Department also performs maintenance, repair, replacement and installation of stormwater infrastructure throughout the City. Vegetation management and other tasks conducted by City contractors are also recorded in the database as well as costs associated with the City's contract with Fremont County Weed Management for weed control on City properties. Tasks associated with the maintenance of the storm sewer system are assigned in the Cartograph database which allows for tracking of costs and associated information. These costs are shown in the table in Appendix B.

During 2022, the Stormwater Maintenance Crew cleaned and maintained the following which resulted in the removal of 93.1 cubic yards of debris and sediment:

- 348 storm drains and irrigation boxes/clean-outs
- 58 storm manholes
- 98 storm culverts
- 336 storm pipes
- Performed cleaning of storm drain grates only City-wide, primarily after storm events
- Performed debris removal from other City stormwater assets City-wide

Stormwater infrastructure projects during 2022:

- Replacement of storm water infrastructure in conjunction with the 2A Streets Projects on Four Mile Lane.
- Commencement of the Abbey-Rhodes Avenue drainage stormwater capital improvements funded through the Certificates of Participation issued in 2019.

vii. Good Housekeeping: The Street Sweeping Program through the City Streets Department is also partially funded through the Stormwater Program as it removes sediment and trash from the streets which otherwise would enter our storm sewer system and eventually our waterways. In 2022, the street sweeper removed 1,005 tons of sediment and debris from the City streets. The Streets Department's annual leaf pick-up program also benefits stormwater quality by removing yard waste (and potential nutrients) that has the potential of entering our storm sewer system. The 2022 event collected 337.9 cubic yards of leaves, of which 288.4 cubic yards were recycled.

3. Nutrient Source Reductions: The permittee must implement a program to prevent or reduce nitrogen and phosphorus in stormwater runoff associated with municipal facilities and operations. The City of Cañon City must evaluate, identify and document municipal operations and facilities that have the potential to contribute nitrogen and phosphorus to stormwater runoff and ultimately to the Arkansas River and Four Mile Creek. The City must then implement control measures to prevent or reduce this from happening. These requirements had a compliance deadline of July 1, 2020.

The Pollution Prevention Operations and Maintenance Manual addresses operations and procedures to reduce or prevent nitrogen and phosphorus in stormwater runoff from municipal facilities and operations. The Cartegraph database forms provide for the evaluation, identification and documentation of the facilities with the potential to contribute nutrients to runoff, as well as the types of control measures implemented to prevent or reduce pollutants from leaving the facility. The manual was created and implemented on January 1, 2010. The manual was reviewed and revised in 2017 and again in 2020. No new control measures needed to be implemented to address nitrogen and phosphorus in stormwater runoff from municipal facilities or operations.

4. Outdoor Bulk Storage Structures of More Than 55 Gallons for Petroleum Products and Other Liquid Chemicals: The permit requires secondary containment or equivalent protection for any municipal bulk storage structures within our permit boundaries (City Limits). Currently, municipal facilities within the permit area do not have any bulk storage structures which meet the permit requirements. If at any time such structures are installed within the permit area, secondary containment or equivalent protection will be provided. This requirement had a compliance deadline of July 1, 2021. Secondary containment was installed around the Magnesium Chloride container at the Public Works facility on October 3, 2018, which is outside of the permit limits.

5. Training: The permit requires that applicable municipal staff be trained to implement good housekeeping and pollution prevention during their regular duties. The training must also include information on trash and its effects on water quality. A video training was created in December, 2020, which all applicable employees hired after July 2019, are required to complete. Fifteen employees completed the on-line training and passed the exam in 2022. Each received a copy of the Pollution Prevention Operations and Maintenance Manual upon completion of the training.

Other Duties, Trainings and Meetings

In addition to duties conducted to meet the City of Cañon City's Stormwater Discharge Permit requirements, Stormwater and Engineering personnel also perform additional duties and attend trainings, conferences and association meetings in which the City has a membership. Cost information is not tracked in the OMS database for all of these activities; for those that are, the cost information is included in Appendix B. Information on these items follows:

Other Duties:

1. Stormwater and GIS personnel maintain and update the impervious areas for all parcels within the City limits in regards to the Stormwater Utility Fee.
2. Assistance with projects as assigned by the Director of Public Works.

Trainings and Conferences:

1. MS4 Inspector 2-day virtual training
2. Trash Capture webinar by StormTrap
3. Quarterly trainings on the Cartegraph OMS asset management database

Memberships/Partnerships: The City of Cañon City is a member of, or involved in, several councils and associations. The following meetings were attended during 2022:

1. Colorado Stormwater Council (CSC): Cañon City's representative to the CSC attended 11 virtual general membership meetings, 1 Post-construction committee meeting, 8 303d Committee meetings and 5 Monitoring Workgroup meetings.
2. MS4 Permit Workgroup Quarterly Meetings, hosted by Mile High Flood District: Three meetings were attended during the year.
3. The Stormwater Program is also a member of the Southern Colorado Stormwater Education Committee, along with the City of Pueblo, Pueblo County, Pueblo West Metro District and CSU-Pueblo. The committee hosts a seminar each year for construction stormwater education and training of contractors, developers, engineers and municipal employees. During 2022, 5 meetings were attended in preparation for the 2022 and 2023 regional seminars.

APPENDIX A
EDUCATION & OUTREACH EXHIBITS



Stormwater Management Program

Food Vendor Fact Sheet

ILLICIT DISCHARGES

What is an illicit discharge? Technically, anything other than stormwater entering our storm sewer system is considered an illicit discharge. The storm sewer system includes City streets, curb and gutter, and drainages, as well as storm inlets and pipes.

Why should we care about illicit discharges?

Our storm sewer system does not go to a treatment plant before it discharges to the Arkansas River and Four Mile Creek. Anything that enters the system has the potential to enter our waterways. Oil, antifreeze, pet waste, yard waste, trash and other pollutants will contaminate the waterway, making it less safe for human and wildlife use. Our drinking water comes from the Arkansas River – the more pollutants that enter, the more that has to be removed and treated before use.

Pollution Prevention

Do not dump oil, chemicals, waste and trash into the streets. Clean up spills and properly dispose of trash and other waste. If you are discovered intentionally dumping chemicals and waste into the storm sewer system, which against City Municipal Code, you will face enforcement actions, up to and including fines.

The City of Cañon City welcomes your participation in local festivals and events. As food vendors at outdoor events or along City streets, unique opportunities exist to assist the City in protecting the water quality of our local waterways. This fact sheet contains some tips for minimizing potential impacts to our storm sewer, stormwater runoff and local waterways. Stormwater runoff enters the storm sewer system, which includes City streets, and flows directly to our local waterways, including the Arkansas River and Four Mile Creek. It is not treated before reaching the river or creek so any contaminants it picks up along the way, such as grease, trash and food waste has the potential to be deposited in the river. We hope these tips will help to minimize the potential for contamination of stormwater runoff and encourage food vendors to contact the Cañon City Stormwater Program with any questions they may have.

Trash Disposal

Provide trash receptacles if the event coordinators do not so patrons can dispose of the trash from their meals. This will help to keep items such as napkins, straws and straw wrappers from being easily blown away.

Trash receptacles should be placed where it is convenient for all to use, but not where they may be easily tipped over.

Secure lids should be provided for the trash receptacle to prevent trash from spilling out.

If you notice that trash receptacles provided by the event coordinators or the City of Cañon City are full or overflowing, please contact the event coordinator or City personnel to arrange to have them emptied.

Utilize the dumpsters or trash receptacles provided for disposing of solid waste generated by your food preparation or bag your trash and take it with you for proper disposal later.

Good Housekeeping

Secure all items, such as condiments, napkins, straws or utensils to prevent items from being blown away.

Police the area around your food truck as often as possible and pick up trash or dropped items to dispose of properly.

Apply absorbent, such as kitty litter, to spills and drips on any pavement around your food truck. Sweep up the absorbent and dispose of in the trash.

Empty drip trays from drink dispensers into a container for disposal. **Under no circumstances can these be emptied onto the pavement or ground.**

Illegal Dumping Examples



Fats, Oil and Grease (FOG) Management

Disposal of fats, oil and grease generated through food vendor's daily operations can significantly contribute to stormwater runoff pollution if not managed properly. These tips should be considered to properly manage FOG wastes.

Never dump grease, oil, fats or other liquid wastes in a dumpster designed only for solid waste. These dumpsters are not leak-proof.

Check if the event coordinator has arranged for a grease disposal bin to be available during the event. If one is available, use it for disposal of used grease and oil.

If a grease disposal bin is not available, place the used grease or oil into appropriate containers with secure lids and take them with you for proper disposal.

Do not store used grease containers outside of your vendor truck or cart. Stormwater can wash grease residue off of the containers, contaminating the runoff. If the containers must be stored outside, they need to be under cover or have secondary containment placed around them to catch any spills or contaminated stormwater. Secondary containment can consist of tubs or other containers designed to catch the spills, drips or stormwater from the grease containers. Be aware that any liquid in the secondary containment cannot be dumped on the ground; it must be disposed of properly.

Employee Training

Employee training is a vital part of preventing potential stormwater pollution. The following items should be considered during training of employees.

Fats, oils and grease should never be dumped down a sink drain or toilet. These substances will cause clogging of the sanitary sewer which degreasers, solvents or hot water will not remedy.

Likewise, any fats, oils, grease or other liquid should never be dumped on the ground, pavement or in a storm drain.

Only dry clean-up methods should be used on spills and drips. These can include rubber scrapers, paper towels, absorbents, or kitty litter. Absorbents and kitty litter can be swept up and disposed of in the regular dumpster.

Educate employees and provide the proper procedures and tools needed to transfer used grease, oil and fats to the storage container.

Waste water in mop buckets or cleaning containers should never be dumped outside, especially not on pavement. If it is not greasy it could be disposed of in a sink or toilet. If it contains a layer of grease, it may need to have the layer skimmed off and disposed of separately.

Enforcement

If illegal dumping of any substance is discovered or reported, the City of Cañon City's Stormwater Program will make every attempt to identify the party responsible. Enforcement actions may include written notices of non-compliance, fines or assessment of abatement costs incurred by the City or its contractors for the clean-up. If the dumping is shown to be willful, criminal charges may be pursued.



CITY OF CAÑON CITY

Active Food Truck Permits

Page 1

updated 08/26/22

Permit No.	Food Truck Name	Owner & Contact Info.	Date of Expiration
TEMP 2022-008	Snackin Mackins LLC	Cory Mackin 303.999.6483 snackin.mackin79@gmail.com	April 15, 2023
TEMP 2021-007	The Butcher's Kitchen	Dan Ellingson 719.431.1845 butcherskitchen19@gmail.com	June 28, 2022
TEMP 2021-008	Fire & Ice BBQ (UK LLC)	Leslie Martinez 719.778.9723 ukiahjw@icloud.com	June 10, 2022
TEMP 2021-009	Robinz N Da Hood Iscream	Robin Simmons 719.453.8771 rsegura6@yahoo.com	June 23, 2022
TEMP 2021-010	SoCo Chicken	Dana & Deb Rodenbucher 719.280.7626 info@socochicken.com	June 30, 2022
TEMP 2022-013	On The Hook Fish & Chips	William Gottwalt 320.309.0879 william@onthehoodfishandchips.com	July 13, 2023
TEMP 2021-013	Gratitude Café LLC		July 20, 2022
TEMP 2021-014	Wunder Wagon	Lauri L. Wunder 719.429.2976 wunderwagon@yahoo.com	August 2, 2022
TEMP 2021-015	The Hungry Buffalo	Suzanne Ray 719.281.1591 thehungrybuffalofoodtruck@gmail.com	September 7, 2022
TEMP 2021-016	Happy Plate	Jennifer Cuccurullo 936.668.2271 jen.cuc@hotmail.com	September 9, 2022
TEMP 2021-018	IDK Fusion Catering	Timothy Shane Neely 719.453.3431 idkfusioncatering@gmail.com	October 3, 2022

Active Food Truck Permits

Page 2

updated 08/26/22

Permit No.	Food Truck Name	Owner & Contact Info.	Date of Expiration
TEMP 2021-019	8 Yours 2 Kettle Corn	Ken & Jennifer Trusty 910 Tennessee Ave jenlovesken1989@gmail.com	November 2, 2022
TEMP 2021-020	Joe's Food Stop	Tom Anderson 2752 E. Main tca0710@gmail.com	November 11, 2022
TEMP 2022-001	Mountain Pass Panini	Jeff Little 318 Dodge Street jeff@mountainpasspanini.net	January 19, 2023
TEMP 2022-002	Summertime Soft Serve	Miranda Kleeb 1390 N. Will Rogers Dr. summertimesoftserve@yahoo.com	February 7, 2023
TEMP 2022-003	Kona Ice of Cañon City	Wendi Foster 6627 La Plata Peak Dr wfoster@kona-ice.com	March 14, 2023
TEMP 2022-004	From The Flames Pizza	Terecita Johnson 281 Savage Loop terecitajohnson@gmail.com	March 15, 2023
TEMP 2022-005	Outer Space Crash Site	Katie Fitzpatrick-McKinney shadykatie@live.com	March 24, 2023
TEMP 2022-006	Emergency Treats	Ron Cook 440 Greydene Ave emergencytreats@gmail.com	March 29, 2023
TEMP 2022-007	Jan's Cotton Candy	Janet Spiekermeier 926 N. Orchard Ave jannlynn1@gmail.com	March 30, 2023
TEMP 2022-009	Coyote Ridge	Gillian Cheek 1530 W. 3rd St. coyoteridgeevents@gmail.com	June 5, 2023
TEMP 2022-010	Mimi's Grill	Shelli Wollner 1123 W. 3rd St mimisgrill2019@gmail.com	June 9, 2023
TEMP 2022-011	Squeeze Me	Tiffany Halpin 2075 Cedar Ave squeezeme2381@gmail.com	May 22, 2023

Active Food Truck Permits

Page 2

updated 08/26/22

Permit No.	Food Truck Name	Owner & Contact Info.	Date of Expiration
TEMP 2022-011	Pirate BBQ Ribs 719.660.8467 dianep69@yahoo.com	Jeff & Diane Bray 20290 Outback View Fountain, CO 80817	August 23, 2023

Control Measures (BMPs) Fact Sheet

All construction sites, including residential single family home sites, are required to implement appropriate stormwater control measures to prevent potential pollutants from leaving the site, regardless of whether a stormwater permit is required for the site or not. Control measures should be implemented or installed **before** any land-disturbing activities begin at the site. Land-disturbing activities include, but are not limited to: clearing, grading, installation or improvement of haul or access roads, excavation, demolition, staging, stockpile and borrow areas. If pollutants, including sediment, leave the site due to failure to implement or install control measures or maintain them in good working order, the City of Cañon City will pursue enforcement actions against the owner or operator of the site. Enforcement actions can include verbal education/warnings, written Notice of Non-Compliance, Stop Work Orders, and/or assessment of fines of \$250.00 per day per violation for each day the violation exists.

Control Measures for construction sites can be either non-structural (procedural) or structural in nature. The City of Cañon City **will not** specify which control measures must be used on a site; only that control measures must be implemented and maintained to prevent or minimize pollutants leaving the site. It is solely up to the site owner/operator to determine which control measures work best for the site. A guide to common potential pollutants and the control measures which can be used to address them is provided below.

Erosion Control and Sediment

Non-structural control measures:

- Construction Phasing to minimize the amount of exposed or disturbed soil at any given time.
- Protection of Existing Natural Features such as vegetation that will not be disturbed during construction.
- Use of Vegetative Buffers along existing drainages to slow and filter runoff. Buffers may need to be mowed or re-seeded during construction to preserve their integrity.
- Dirt Stockpiles should be stored out of the flow of stormwater through the site or removed completely from small sites. Stockpiles should never be placed in existing drainages, even temporarily. Stockpiles should be covered or temporarily seeded if they will not be disturbed for an extended period of time (14 days or more).
- Stabilize steep slopes as soon as possible by rough grading, terracing, or with structural control measures.
- Stabilize exposed soils as soon as possible by scheduling landscaping or adding mulch until the area can be landscaped.
- Limit vehicle access to site, especially when conditions are wet and muddy.
- Street sweeping on a regular schedule (daily) to remove any sediment tracked onto the pavement. Please keep in mind that once sediment is tracked onto the pavement in the Dawson Ranch, Gold Canon, and Four Mile Ranch subdivisions it is extremely difficult to

remove. It is better to prevent it from being tracked onto the pavement than to try to remove it.

Structural control measures:

- Install sediment control measures along the downhill perimeter of the site and along existing drainages. Silt fence or sediment control logs (wattles) can be appropriate perimeter controls.
- Install inlet protection on any downstream storm drains. The type of inlet protection used will be dependent upon the type of storm drain present. Sediment control logs and silt fence are not appropriate when the storm drain is located on a paved surface such as a street as they cannot be secured. Rock socks are not recommended if the storm drain may be in the flow of traffic.
- Dirt and material stockpiles should be protected from storm run-on by perimeter controls such as rock bags or sediment control logs. Rolled erosion control products or tarps can be used to protect stockpiles from exposure to storm events.
- Steep slopes can be protected using rolled erosion control products, installation of temporary slope drains or diverting stormwater runoff away from the slope until it is stabilized.
- Vehicle Tracking Pads should be used at the site access to remove sediment from vehicle wheels when exiting the site. Tracking pads can be composed of coarse rock or may be a reusable proprietary product such as FODS or mud mats. Rock or FODs are more appropriate for sites with heavy construction equipment entering and leaving the site. Mud mats are more appropriate for sites with low traffic and no heavy equipment. Sediment control logs are not appropriate for vehicle tracking control.

Material and Waste Management

Non-structural control measures:

- Employee training on proper waste disposal, material storage, and spill prevention and response.
- Store materials out of the flow of stormwater through the site.
- Practice good housekeeping daily by picking up trash and loose materials.

Structural control measures:

- Cover materials which may have the potential to leach pollutants when exposed to stormwater.
- Provide secondary containment for all liquids on site or store under cover. Make sure all liquid materials are stored out of the flow of construction traffic.
- Provide a designated concrete and masonry wash-out area. The area can be as simple as a bucket with secondary containment and out of traffic flow or may include a lined depression or reusable tub for larger clean-outs. Clean up spills/leaks immediately.

- Provide a dumpster or trash cans for material wastes and employee trash. Make sure they are emptied on a regular basis.
- Stake port-o-lets to prevent them from potentially tipping and place them out of the flow of traffic and stormwater flow.

Additional control measures, installation and maintenance details can be found in the Urban Storm Drainage Criteria Manual – Volume 3 at <https://mhfd.org/resources/criteria-manual/>.



Stormwater Management Program News

First Quarter 2022

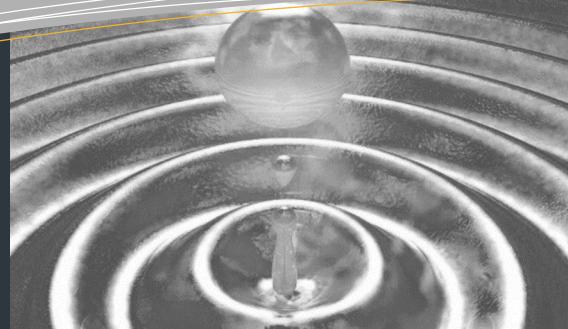
WINTER STORMWATER TIPS

Place snow shoveled from sidewalks and driveways onto your lawn or landscaped areas. As the snow melts it will provide extra water for the area rather than running down the street into the nearest storm drain, carrying trash and pollutants with it to local waterways.

Businesses with parking lots should make sure plowed snow is not piled on top of storm drains. Snow piled on top of storm drains could prevent runoff from the parking lot entering the drain which could lead to icy areas if the runoff puddles and re-freezes.

Use deicer sparingly; sweep up excess deicer and dispose of it in the garbage. Consider using non-chloride, non-sodium chloride, or low/mixed chloride deicers which are friendlier to pavement and the environment.

Irrigation ditches usually begin to run in April. Make sure any irrigation lateral ditches or pipes along your property are cleared of debris and sediment before the main irrigation ditches are filled.



City of Cañon City

P.O. Box 1460
128 Main Street
Cañon City, CO 81215-1460

2022 STORMWATER PROGRAM FISCAL OVERVIEW

Following is a brief fiscal overview of the program. The information is taken from the 2022 Budget and past budgets for the City of Cañon City.

REVENUES

Stormwater Utility Fees – This fee generates the majority of the funds used to meet the requirements of our Federal and State mandated stormwater management program, for the maintenance of the City's stormwater infrastructure and some capital improvements. The Utility Fee is based upon the area of impervious surface (such as buildings, driveways, patios, sidewalks and other hard surfaces) which is present on each property within the City limits. The current fee is \$0.004659 per square foot per month. Additional revenue is derived from impact fees, runoff management fees, enforcement penalties and supplemental funding from grants.

EXPENDITURES

Repair/Maintenance – The stormwater program is responsible for the City's stormwater management facilities and infrastructure such as detention basins, drainage channels, inlets, storm manholes, pipes, culverts and outfalls. Funding is provided for both Public Works and contracted services to maintain these facilities.

Capital Outlay – Funds in this category are used for major new stormwater projects and rehabilitation or replacement of existing stormwater infrastructure.

Floodplain Management – Funds are provided for professional consulting services, studies and oversight for compliance with the National Flood Insurance Program.

GIS – The stormwater program relies on Geographic Information Systems (GIS) to meet several program objectives; therefore the program helps support the Fremont County Regional GIS Authority.

Personnel – Costs normally associated with staff. Currently the program has one full-time Stormwater Coordinator and two full-time Stormwater Maintenance personnel.

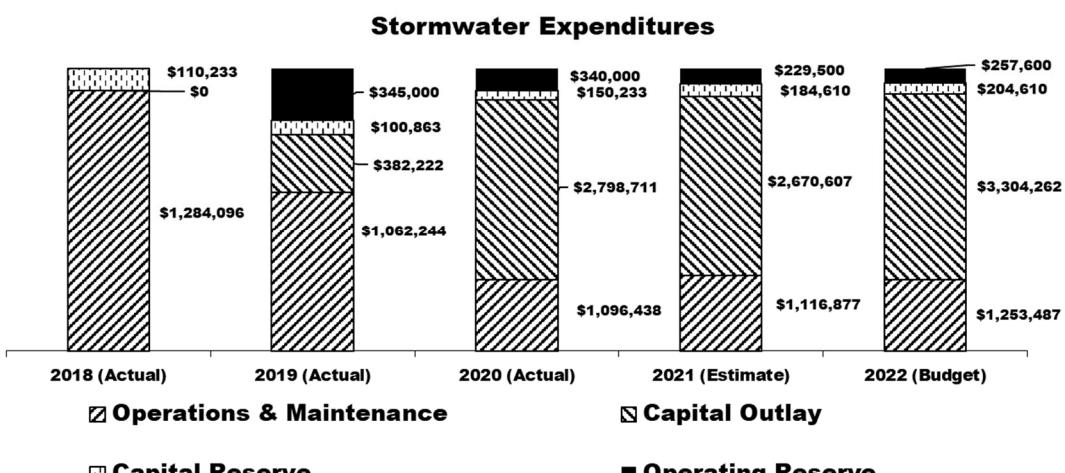
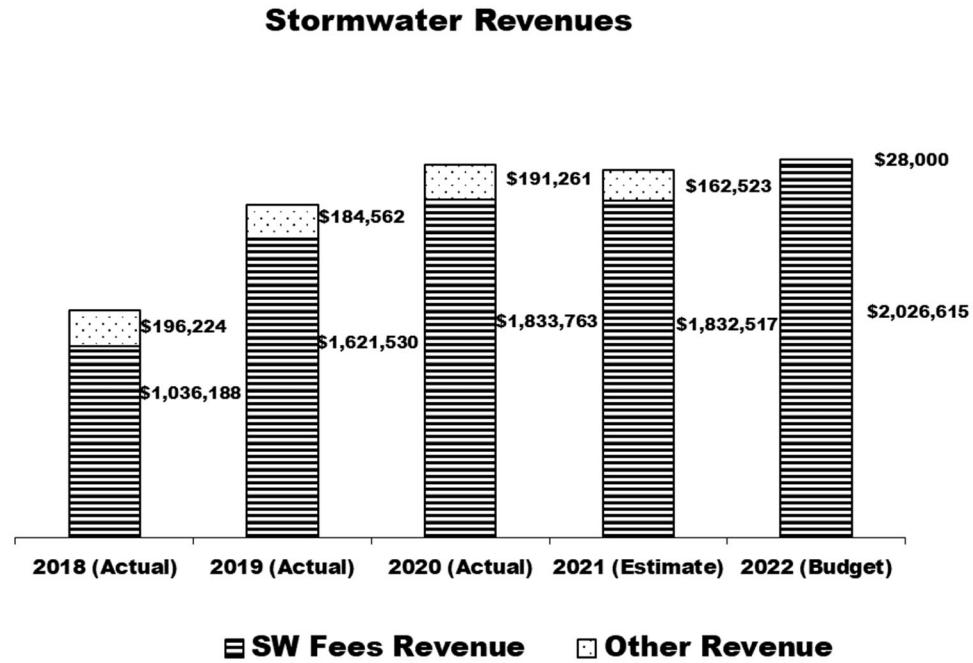
Program Support – This category includes supplies, materials, services and training used in meeting our stormwater management program goals. It also includes reimbursement for technical and administrative support provided by other City departments.

COP Project Fund – This category contains the funds provided by the issuance of the Certificates of Participation in November, 2018, for stormwater improvements.

CAPITAL & OPERATING RESERVES

Any and all funds remaining at the end of the year are transferred to capital and operating reserve funds. It is a policy of the City of Cañon City that the utility must maintain a minimum of 75 days operating expenses (approximately 20.5%) in reserve. Funds over that amount are reserved and accumulated for capital improvement projects.

The following charts give an overview of the actual revenues and expenditures for 2018 – 2020; the estimated revenues and expenditures for 2021 and the amounts budgeted for 2022.

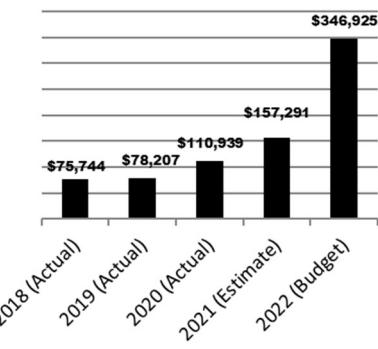


“When we try to pick out anything by itself, we find it hitched to everything else in the Universe.” – John Muir

Please feel free to direct any concerns or questions to Glenda DeBekker, City of Cañon City Stormwater Program at either 719.276.5265 or grdebekker@canoncity.org.

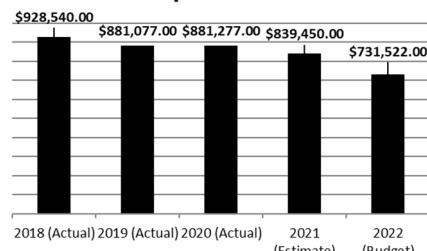
Additional Comparison Charts

Personnel Expenditures

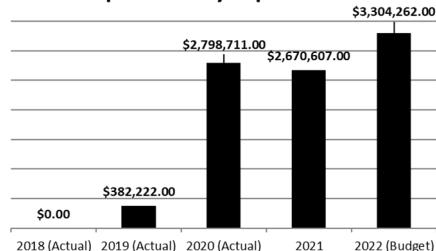


Personnel Expenditures reflect the addition of two new Stormwater Maintenance positions in 2021.

Repair & Maintenance Expenditures

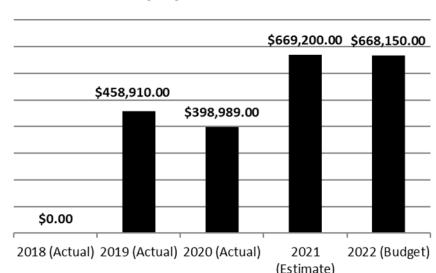


Capital Outlay Expenditures



Capital Outlay Expenditures include the \$8 Million borrowed by the City for Stormwater Capital Improvements in 2018.

Loan Repayment Debt Service





Stormwater Management Program News

Second Quarter 2022

Stormwater Pollution Prevention Tips

Spring and Summer means yard work for many. Follow these tips to minimize potential impacts to stormwater runoff.

- Yard work often means mowing the lawn, weeding flower beds and gardens, and pruning trees and bushes. Grass clippings should be bagged for disposal or composted to create natural fertilizer.
- Never blow, sweep, or place grass clippings or other yard waste in the street along the curb. Runoff from storm events or over-irrigation of lawns can wash the clippings or other waste into the nearest storm drain or culvert, leading to blockages of flow and localized flooding. If the waste makes it through the storm sewer system, it will be washed into the Arkansas River where it may cause other issues such as algae blooms or other impacts to wildlife and recreation.
- Use fertilizers sparingly and only as the manufacturer directs. Excess fertilizer will just wash off the lawn and into the storm system; again potentially causing water quality problems in the Arkansas River and possibly other drainages. Excess fertilizer in our waterbodies can lead to algae blooms which impact wildlife, recreation and drinking water.
- Sweep paved areas such as sidewalks and driveways rather than hosing them down. Collect the sweepings and dispose of them in the trash.



City of Cañon City

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Clean-Up Events

April was Earth Month with April 22nd designated as Earth Day. Many clean-up events took place in March, April, and May and the City of Cañon City's Stormwater Program would like to recognize and thank all the organizations and volunteers that helped clean up area parks, trails, the Arkansas River, and even City streets. Below are a few that took place. If any other events took place be sure to let us know so we can send our thanks and recognition.

The Cañon City Metro Rec District hosted its annual Clean Up/Green Up Riverwalk and Arkansas River clean up on April 23rd. The City of Cañon City co-sponsored the event again this year.

Despite the windy conditions, 33 volunteers participated, removing 680 pounds of trash along the Arkansas River, Riverwalk, City and Rec District Parks and City streets.

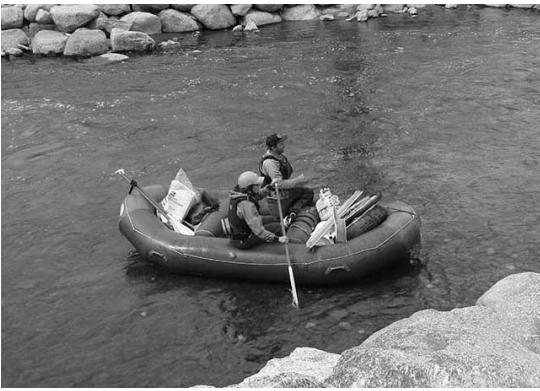


2022/04/23



Special thanks go to the volunteers that tackled trash on Field Ave and around the Harrison School!

Royal Gorge RIO organized an Arkansas River clean up on Sunday, May 1st. Sixty-seven volunteers walked or floated 42 miles of the Arkansas River, removing 1,811 pounds of trash and debris! Removed items included tires, propane tanks, a trash can and buckets, and even a toilet seat!



The Cañon Proud Clean-Up took place on March 5th. About 50 volunteers tackled areas around the city, including area trails, cleaning up trash and debris. Others took advantage of the electronics recycling and dumpsters available for trash drop-off.

Fantastic Job Everyone!

A huge thanks to everyone that participated in, donated to and sponsored these events. Let's make every day Earth Day: take time to pick up litter, don't throw litter out of vehicles, pick up after pets and dispose of the waste properly. We all can make a difference with just little actions.



ILICIT DISCHARGES

What is an illicit discharge?

Technically, anything other than stormwater entering our storm sewer system is considered an illicit discharge. The storm sewer system includes City streets, curb and gutter, and drainages, as well as storm inlets and pipes.

The Colorado Department of Public Health and Environment (CDPHE) does allow some discharges to not be enforced against. These include, but are not limited to: Irrigation and lawn watering flows, stream and groundwater flow, uncontaminated pumped groundwater and crawl space dewatering, water line flushing, residential car washing, dechlorinated swimming pool water, water from street sweeping, agricultural stormwater and water from emergency fire-fighting.

Why should we care about illicit discharges?

Our storm sewer system does not go to a treatment plant before it discharges to the Arkansas River and Four Mile Creek. Anything that enters the system has the potential to enter our waterways. Oil, antifreeze, pet waste, yard waste, trash and other pollutants will contaminate the waterway, making it less safe for human and wildlife use. Our drinking water comes from the Arkansas River – the more pollutants that enter, the more that has to be removed and treated before use. So please, do not dump chemicals, waste and trash into the streets. Clean up spills and properly dispose of trash, pet waste and yard waste. If you are discovered intentionally dumping chemicals and waste into the storm sewer system you could face enforcement actions, including fines.



Weather Tidbit:

February was the 3rd snowiest recorded since 1900, with 21.9 " of snow in Cañon City. It was only beat out by February, 1903, with 27" and February, 1997, with 29". May's 9.5" of snow was the second snowiest May since 1900, surpassed only in May, 1990, with 9.7" of snow.



Stormwater Management Program News

Third Quarter 2022

Stormwater Program Update

Rhodes Avenue Stormwater Improvement Project: Drainage improvements are continuing on Rhodes Avenue. The channel has been widened and stabilized from the south side of the Oil Creek Ditch to south of Ute Street. Improvements will continue north to the highway.



The Colorado Department of Public Health and Environment (CDPHE) has announced its intent to begin the review of the Phase II General Stormwater Discharge Permit for Municipal Separate Storm Sewer Systems (MS4s) later this fall. Cañon City was first issued this permit in 2003; it was renewed in 2008 and 2016 with significant changes. The Cañon City Stormwater Program will be participating in reviewing and commenting on any changes proposed by CDPHE. Future newsletters will include updates on the process.



The City of Cañon City has received new aerial footage of the city from the Fremont County GIS. We will be continuing our usual reviews of impervious area on parcels within the City limits with the updated footage. Property owners may see a change in their Stormwater Utility Fee due to normal reviews. As always, if you have a question, please contact us at 719-269-5265. We are available to do on-site assessments and mapping to confirm and update the impervious area for properties.



City of Cañon City

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The Latest Low-Down on Litter

Litter is a large problem throughout the United States, even here in Cañon City. It is the result of improperly disposed of waste items, whether intentionally or unintentionally. Whether or not littering is intentional, it impacts us and our environment in negative ways. Litter impacts water quality and safety, wildlife, humans and soils. It can cause localized flooding if it plugs up storm drains. It can impact economic development, local economies, and overall quality of life.

In 2009, Keep America Beautiful completed a litter survey on the cost of litter cleanup: the survey estimates that the U.S. spends more than \$11.5 billion every year in litter cleanup. Most of that cost (\$9.1 billion) is spent by businesses, with local and state governments, schools and other organizations covering the rest.

Keep America Beautiful has conducted three major studies on litter in America – in 1969, 2009 and again in 2020. The 2009 survey compared its results with 1969 survey. Here are some things that had changed in the 40 years between the surveys:

- Visible litter on our roadways decreased about 61%
- Paper, metal, glass and beverage container litter decreased by about 74.4%
- Plastic items in litter increased over 165%, reflecting a 340% per capita increase in the use of plastic packaging over the 40 years between studies

The 2020 study summary highlights the following findings:

- The study included waterways in the U.S. for the first time – it found an estimated 50 billion pieces of litter along roadways and waterways; that's **152 pieces of litter for every U.S. citizen**
- Nearly 26 billion pieces of litter were found along waterways and almost 24 billion along roadways
- The amount of litter on roads is estimated to be down 54% since the 2009 survey
- Cigarette butt litter along roads has decreased from 18.6 billion in 2009 to 5.7 billion in the 2020 study, but still remains the number one type of litter
- Cardboard, beer container, food packaging film, sports drink container and water container litter has increased since 2009
- Litter composed of plastic has decreased less than other types of litter materials
- Since the study was conducted during the Covid-19 pandemic it noted an increase in a new type of litter – personal protective equipment (gloves and masks).

While the studies show a downward trend in the amount of litter found along our roadways and waterways, just looking around shows that there is still a long way to go. Here are some tips to help prevent litter:

- Make sure the lids on garbage dumpsters/totes are securely closed. If items, such as cardboard, won't fit in the dumpster make sure they are secured. Windblown trash can end up in the streets, possibly causing traffic hazards as well as ending up in our drainages and waterways.
- Secure loose materials and trash in pickup beds so items do not blow out.
- Recycle and reuse! The Ocean Conservancy estimates that 6 out of 10 of the most commonly found litter items in our nation's waterways and oceans are fully recyclable. **November 15th is America Recycles Day:** make it a point and habit to recycle. Our local trash companies offer recycling programs; contact them for details.
- Pick up litter when you see it, volunteer in local clean-up events or organize one of your own.

Several Cañon City organizations hold clean-up events throughout the year. Keep an eye out for events or contact the organizations listed below to participate in or help organize an event.

- Fremont Adventure Recreation: www.joinfar.org
- Cañon City Area Recreation and Park District: <https://ccrec.colorado.gov>
- Royal Gorge RIO: <https://royalgorgerio.org/>
- Fremont360 Litter Mates on Facebook
- Royal Gorge Region BLM: Sean Reynolds, Outdoor Recreation Planner, 719-269-8526
- Cañon City Stormwater Program: grdebekker@canoncity.org

The full summary of the Keep American Beautiful 2020 National Litter Study can be read at <https://kab.org/litter-study/>.

The City would also like to thank the employees of First Interstate Bank who picked up trash recently on County Road 3A (the road to the Royal Gorge). Great job!

If you have an clean-up event in the planning, be sure to let us know so the City can help promote it.



"When we try to pick out anything by itself, we find it hitched to everything else in the Universe." – John Muir

Please feel free to direct any concerns or questions to Glenda DeBekker, City of Cañon City Stormwater Program at either 719.276.5265 or grdebekker@canoncity.org.

Stormwater Pollution Prevention Tips

Follow these tips to minimize potential impacts to stormwater runoff.

- Fall yard work means leaves! Leaves should be bagged and placed with garbage for pick up. The City of Cañon City will hold its annual leaf pickup near the end of November – watch for announcements. Other alternatives include composting yard waste or leaving the leaves in place to provide food and shelter for beneficial insects.

- Use fertilizers sparingly and only as the manufacturer directs. Excess fertilizer will just wash off the lawn and into the storm system; again potentially causing water quality problems in the Arkansas River and possibly other drainages. Excess fertilizer in our waterbodies can lead to algae blooms which impact wildlife, recreation and drinking water.

- Tree branches from this year's storms are still occasionally coming down. If the branches are from City trees in the area between the street and sidewalk, please contact the City Parks Department for removal. While waiting for the removal please move the branches to the top of the curb. Larger branches and sticks prevent the street sweeper from cleaning along the curb and gutter. They may also block flow from storms leading to localized flooding.

- When prepping your vehicle for winter, watch for leaks and drips. Use kitty litter or another type of absorbent to soak up the fluid, then sweep it up and place in the trash. Automotive fluids such as oil and antifreeze can be picked up by storm runoff and carried to the river. They are also highly toxic to pets and wildlife.

- Sweep paved areas such as sidewalks and driveways rather than hosing them down. Collect the sweepings and dispose of them in the trash.

APPENDIX B
TRACKED COSTS

Tracked Time and Costs from Cartegraph OMS Database						
	Labor (Hrs)	Labor (Cost)	Equipment (Cost)	Material (Cost)	Other (Cost)	Total Cost
Public Involvement/Participation						
Requests - non-Illicit Discharge/Construction	133.21	\$5,613.22	\$2,334.75	\$1.89	\$9,449.88	\$17,399.74
Public Education and Outreach	161.50	\$8,104.04	\$1,033.28	\$0.00	\$2,969.92	\$12,107.24
Illicit Discharge and Detection						
Non-Enforcement Tasks	47.76	\$2,169.28	\$903.47	\$0.00	\$43.00	\$3,115.75
Enforcement Tasks (Costs are often rolled into inspection costs)	9.86	\$495.29	\$96.59	\$0.00	\$21.99	\$613.87
Construction Sites						
Non-Enforcement Tasks	52.82	\$2,692.31	\$714.74	\$0.00	\$0.00	\$3,407.05
Enforcement Tasks (Costs are often rolled into inspection costs)	1.00	\$50.24	\$5.19	\$0.00	\$15.64	\$71.07
Post-Construction Permanent Stormwater Control Measures						
Inspections (Municipal and Private)	307.25	\$15,408.39	\$620.45	\$0.00	\$154.89	\$16,183.73
Municipal Pollution Prevention/Good Housekeeping						
Facilities Inspections	11.57	\$581.17	\$240.30	\$0.00	\$0.00	\$821.47
Stormwater Infrastructure and Channel Inspections	81.80	\$4,096.86	\$1,722.32	\$0.00	\$0.00	\$5,819.18
Stormwater Infrastructure Maintenance Crew	2026.75	\$77,718.11	\$78,357.05	\$19,131.98	\$20.00	\$175,227.14
Street Sweeping (Stormwater contribution 55% of cost)						\$96,631.93
Other Permit Compliance Duties, Misc. Projects, Committees						
	149.95	\$7,544.29	\$109.05	\$0.00	\$65.10	\$7,718.44
Annual Program Review and State Report	44.50	\$2,229.19	\$0.00	\$0.00	\$0.00	\$2,229.19
Public Works Street Dept Stormwater Tasks	1523.50	\$61,259.36	\$22,708.71	\$7,237.24	\$11,618.00	\$102,823.31
City Contractor						\$107,851.93
Fremont County Weed Control on City Stormwater Properties	5.25	\$263.70	\$41.54	\$0.00	\$3,806.50	\$4,111.74
Stormwater Utility Impervious Area Updates	151.00	\$7,581.98	\$1,292.89	\$0.00	\$0.00	\$8,874.87

\$565,007.65 Total

Streets Department Annual Leaf Pick-up Program

Costs provided through the Streets Department

212.00	\$6,640.10	\$3,616.45	\$0.00	\$435.00	\$10,691.55
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Parks Department - Maintaining Pet Waste Stations

Costs provided through the Parks Department Budget

104.00	\$3,900.00		\$782.50		\$4,682.50
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This table does not include Capital Improvement Projects costs or budgetary expenditures not tracked in Cartegraph.