Phase II MS4 Annual Report

For the Town of

COPPER CANYON
TEXAS

Stormwater Management Program
Year 5
(January 1, 2023 – December 31, 2023)
Permit Authorization Number: TXR040565

TCEQ

Texas Commission on Environmental Quality

March 2024

Prepared By

tnp

5237 N. Riverside Drive, Suite 100
Fort Worth, Texas 76137
(817) 336-5773

CPP 23013

Phase II MS4 Annual Report Form
TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040565

Reporting Year: 5

Annual Report Year: Calendar Year

Beginning and End Dates: January 1, 2023 – December 31, 2023

MS4 Operator Level: Level 1

Name of MS4/Permittee: Town of Copper Canyon

Contact Name: Troy Meyer, Town Administrator

Telephone Number: 940-241-2677

Mailing Address: 400 Woodland Drive
Copper Canyon, TX 75077

Email Address: townadministrator@coppercanyon-tx.org

A copy of the annual report was submitted to the TCEQ Region.

☒ Yes ☐ No

Region the annual report was submitted to: TCEQ Region 4.

B. Status of Compliance with the MS4 GP and SWMP (Part IV Section B.2(a))

1. Provide information on the status of complying with permit conditions: (TXR040000 Part IV.B.2)

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	☒	☐	BMPs have been met or progress has been made towards the goal.
Permittee is currently in compliance with recordkeeping and reporting requirements.	☒	☐	Report is being submitted for Year 5, 2023.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edward Aquifer limitations, compliance history, etc.).	☒	☐	Copper Canyon meets the eligibility requirements of the permit.
Permittee conducted an annual review of its SWMP in conjunction with preparation of the annual report.	☒	☐	Copper Canyon reviewed and proposed changes to the SWMP.

2. Provide a general assessment of the appropriateness of the selected BMPs. Use table below or attach a summary, as appropriate:

MCM	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.
1	Distribute Educational Stormwater Material	Yes, educating the public about stormwater is an important part of reducing pollution that enters into stormwater runoff.
1	Post SWMP and Annual Reports	Yes, educating citizens about the program raises awareness of everyday stormwater issues that can be easily remedied.
1	Volunteer Cleanup Activities	Yes, educating and involving the public can help raise awareness about stormwater pollution.
2	Illicit Discharge Ordinance	Yes, regulating and enforcing illicit discharges is important in reducing pollution.
2	Dry Weather Screening	Yes, visually inspecting Town outfalls can lead to the detection of illicit discharges and allows for periodic monitoring.
2	Storm Sewer Map	Yes, being able to easily identify the source of illicit discharges is vital to protecting stormwater quality.
2	Education and Training on Illicit Discharges	Yes, educating the Town staff on identifying and taking corrective actions can eliminate future illicit discharges.
3	Erosion and Sediment Control Ordinance	Yes, by allowing the Town to enforce erosion and sediment control on construction sites, pollutants from stormwater runoff are reduced.
3	Construction Site SWPPP Review	Yes, requiring contractors and developers to submit a SWPPP for review ensures appropriate erosion and sediment controls for construction sites.
3	Construction Site Inspections	Yes, performing the site inspections will ensure proper installation and maintenance of erosion and sediment controls and reduce transport of sediment.
3	Construction Stormwater Training	Yes, stormwater pollution can reduce by properly training staff to identify, report, and correct improper erosion control practices on construction sites.
3	Contractor Comment	Yes, providing a mechanism for contractors to comment about stormwater concerns allows for the Town to address comments ensuring construction requirements are met.
4	Post-Construction Stormwater Requirement	Yes, allows the Town to enforce post-construction requirements, reducing the amount of pollution that might enter the storm drain from runoff.
5	Appropriate Stormwater Pollution Prevention Controls	Yes, determining pollution prevention and good housekeeping practices can reduce stormwater pollution from municipal activities.
5	Properly Dispose of Waste	Yes, properly of disposing of municipal waste can help reduce pollution at Town facilities.
5	Contractor Requirements and Oversight	Yes, the contractual requirements ensure that contractors are using appropriate control measures and standard operating procedures to reduce stormwater pollution when working within the MS4.
5	Municipal Employee Training Program	Yes, the program identifies possible pollutants and remediation to limit or prevent pollutant runoff.

3. Describe progress towards achieving the goal of reducing the discharge of pollutants to the maximum extent practicable. If no progress was made or the BMP did not result in a reduction in pollutants, provide an explanation. Use the table or attach a narrative description as appropriate.

MCM	BMP	Information Used	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (yes or no, explain)
1	Distribute Stormwater Educational Material	Research Educational Information	0	Event	Yes, providing stormwater information raises citizens awareness of stormwater pollution and what can be done to reduce pollution.
1	Post SWMP and Annual Reports	SWMP and Report	4	Reports posted	No, however educating the public about the program can educate residents on how Copper Canyon prevents stormwater pollution.
1	Volunteer Cleanup Activities	Cleanup Events	1	Clean up Events	Yes, involving the public to clean up litter can directly reduce debris from entering local waterways.
2	Illicit Discharge Ordinance	Potential Illicit Discharges Inspected	100%	Potential Illicit Discharges	No, however, creating regulations that govern illegal dumping and illicit discharges can prevent pollutants from entering storm drains.
2	Dry Weather Screening	Outfalls Inspected	41	Outfalls	Yes, it can result in a direct reduction of pollutants if an illicit discharge is found.
2	Storm Sewer Map	Outfalls Mapped	41	Outfalls	No, however, the BMP allows staff to easily track and respond to illicit discharges.
2	Education and Training on Illicit Discharges	Training	1	Attendee	No, however, providing educational information allows the staff to identify and take corrective actions on illicit discharges.
3	Erosion and Sediment Control Ordinance	Construction Site Inspected	100%	Construction Sites	No, however, creating regulations that govern practices on construction sites reduces the amount of pollution in the storm drains and receiving waterbodies.
3	Construction Site SWPPP Review	SWPPP Reviewed	100%	Construction Plan Reviews	No, but it is important the Town have proper review procedures to ensure that construction sites are enacting appropriate pollutant reducing BMPs.
3	Construction Site Inspections	Construction Site Inspected	100%	Construction Sites	No, however, it is important for the Town to have proper inspection procedures to ensure the construction sites are complying with the Town's Erosion and Sediment Control Ordinance.

MCM	BMP	Information Used	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (yes or no, explain)
3	Construction Stormwater Training	Training	1	Attendee	No, however, it is important that current procedures be updated to ensure construction inspections are conducted properly.
3	Contractor Comment	Contractor Comments Address	0	Comments	Yes, providing a mechanism for residents to comment about stormwater concerns allows for the Town to address comments ensuring construction requirements are met.
4	Post-Construction Stormwater Requirement	Post-Construction Inspections	100%	Inspections	No, however, requiring developers to install post construction runoff control measures reduction long-term pollution from the site.
4	Long-Term Maintenance of Post-Construction BMPs	Prepare Draft	1	Draft	No, however, developing long-term operation and maintenance requirements can ensure post-construction BMPs will be maintained to the Town's criteria.
5	Appropriate Stormwater Pollution Prevention Controls	Municipal Facility Inspections	0	Inspection	No, however, performing the assessment on municipal facilities identifies possible pollutants and will help develop standard operating procedures to reduce and minimize pollutant discharges.
5	Properly Dispose of Waste	Develop Procedures	1	Trash & Recycling Procedures	No, however, implementing proper waste disposal procedures can reduce pollutants from entering local waterways.
5	Contractor Requirements and Oversight	Develop Contractual Agreements	1	Draft Agreement	No, however, implementing contractual requirements and oversight ensures that MS4-hired contractors are accountable to the MS4's pollution reduction goals.
5	Municipal Employee Training Program	Training	1	Attendee	No, however, training the employees to be cognizant of and report improper stormwater practices can result in pollutant reduction.

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals.

MCM	Measurable Goal	Success
1	Provide brochures to the public at Town facilities. Distribute brochures to at least one Town event each year.	Partially Met Goal. The Town did not distribute materials at an event, but they did provide materials at Town Hall.
1	Post each Annual Report as it is available and maintain on webpage continuously until end of permit term.	Met Goal. The Town has posted the annual reports on the Town's website.
1	Respond to email comments or questions from public.	Met Goal. The Town is made available to the public to address questions or comments.
1	Advertise the cleanup at least once on the Town's website.	Met Goal. The 2 clean up events were advertised on the Town's Website.
1	Coordinate at least one annual cleanup event.	Met Goal. The Copper Canyon coordinated a clean up day on October 7, 2023.
2	Inspect 100% of illicit discharges located or reported.	Met Goal. The Town investigated 100% of complaints or reports received.
2	Provide point of contact to receive reports of illicit discharges. Investigate 100% of complaints or reports received.	Met Goal. The Town investigated 100% of complaints or reports received.
2	Visually inspect culvert crossings once per year.	Met Goal. A total of 41 culvert crossings were inspected this year.
2	Annually update the storm drainage system map.	Met Goal. The storm drainage map is currently up to date.
2	Provide annual IDDE training at least once a year for designated Town staff and new hires.	Met Goal. The Town engineer provided training for additional staff.
3	Inspect 100% of construction sites each year.	Met Goal. The Town inspects 100% of construction sites each year.
3	Inspect 100% of complaints regarding construction sites each year.	Met Goal. The Town inspected 100% of complaints regarding construction sites each year.
3	Administer the construction plan review process for 100% of new regulated construction projects.	Met Goal. The plan review process was administered to 100% new regulated construction projects.
3	Inspect 100% of construction sites each year.	Met Goal. The Town inspects 100% of construction sites each year.

MCM	Measurable Goal	Success
3	Inspect 100% of complaints regarding construction sites each year.	Met Goal. The Town inspects 100% of complaints regarding construction sites each year.
3	Provide annual construction stormwater training at least once a year for designated Town staff and new hires.	Met Goal. The Town engineer provided training to additional staff.
3	Address 100% of complaints or comments received from construction contractors.	Met Goal. The Town addressed 100% of complaints or comments received from construction contractors.
4	Investigate 100% of post-construction violations or complaints.	Met Goal. Copper Canyon investigated 100% of post-construction violations.
4	Implement maintenance plans for 100% of new owners or operators once post-construction BMPs installed.	Did Not Meet Goal. The Town has drafted maintenance plans and is still in the process of implementing the post-construction maintenance plans.
5	Inspect 100% of municipal operations and maintenance activities each year.	Met Goal. Copper Canyon inspected 100% of municipal operations and maintenance activities.
5	Implement procedures to remove and properly dispose of waste at 100% of municipal facilities.	Met Goal. The Town will implement procedures to remove and properly dispose of waste.
5	Implement contract requirements to 100% of new contractors.	Did Not Meet Goal. The Town drafted contractual requirement agreements for Town-hired contractors and is still in the process of developing requirements.
5	Provide annual municipal employee training at least once a year for designated staff and new hires.	Met Goal. The Town Engineer provided training for additional staff.

C. Stormwater Data Summary

Provide a summary of the results of information collected and analyzed during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

- Public Reporting & Response Procedures
  - The Town actively encourages, tracks, and responds to residents' observations of illicit discharges. While this does not require Town forces to actively monitor, it allows for more "boots on the ground", more visual coverage, and Town awareness and response.
- Construction Site Inspections and Enforcement
  - This BMP requires Town stormwater personnel to be actively monitoring construction sites for stormwater pollutants.

D. Impaired Waterbodies

1. Identify weather an impaired water within the permitted area was added to the latest EPA-approved 303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(d) and 303(d). List any newly-identified impaired waters below by including the name of the water body and the cause of impairment.

- Not applicable. Town of Copper Canyon does not have any impaired waterbodies on the TCEQ 2022 303d list.

2. If applicable, explain below any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern.

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

3. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL.

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

4. Report the benchmark identified by the MS4 and assessment activities:

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

5. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

6. If applicable, report on focused BMPs to address impairment for bacteria

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

7. Access the progress to determine BMP's effectiveness in achieving the benchmark.

- Not applicable. Town of Copper Canyon does not contain impaired waterbodies listed on the TCEQ 2022 303d list.

E. Stormwater Activities (Part IV Section B.2. (d))

Describe any stormwater activities the MS4 operator has planned for the next reporting year.

The Town is currently evaluating the requirements of the upcoming permit renewal and identifying which activities to continue and what new activities they plan to implement. The following is based on preliminary discussions and will be refined with development of their new SWMP. This information is summarized and paraphrased and it is understood that more detail will be provided with the upcoming SWMP.

MCM	BMP	Measurable Goal	Description/Comments
1: Public Education and Outreach	Information on the MS4 Operator's Website	Maintain a webpage with current and accurate information and working links.	The Town will continue to post its Annual Reports on its website.
	Maintain or Mark Storm Drains and Inlets with "No Dumping – Drains to Creek" or similar Message	Install markings for at least 10% of inlets and maintain at least 15% once all markings are installed.	The Town has currently marked 100% of its inlets and will maintain at least 15% annually.
	Publish Articles in local newspaper or newsletter, may be electronic.	Develop topics that are group specific and address activities or pollutants of concern. Two articles to reach target audience.	The Town has a newsletter and articles will be developed that are seasonally and audience appropriate.
2: Public Involvement /Participation	Stream/lake or watershed clean-up events; litter/trash clean-up events such as Texas Stream Team, Adopt-A-Highway, Adopt-A-Spot, Adopt-A-Street, Adopt-A-Stream, etc.	Host a minimum of two events annually.	The Town will host 2 events annually.
	Educational display/booth at a school, public event, or similar event to provide information or displays that work to improve public understanding of issues related to water quality.	Provide one booth or display at minimum annually. The booth or display must be staffed during the time which the event is open to the public.	The Town will have a booth with educational materials at one event per year.

MCM	BMP	Measurable Goal	Description/Comments
3: Illicit Discharge Detection and Elimination (IDDE)	Maintain a current and accurate MS4 map as described in Part IV.D.3.(c)(1)	Review and update, as necessary, at least one time annually to include features which have been added, removed, or changed.	The Town will continue to maintain its outfall map
	Conduct training for all the permittee's field staff.	Conduct a minimum of one training annually for 100% of MS4 field staff that may come into contact with or otherwise observe an illicit discharge, illegal dumping, or illicit connection.	The Town will continue to host training for its relevant staff.
	Maintain and publicize a public reporting method for the public to report illicit discharges, illegal dumping, or water quality impacts.	Maintain a minimum of one public reporting mechanism 100% of the time during the permit term. Publicize the public reporting mechanism a minimum of two times annually.	The Town will continue to provide reporting forms and phone numbers on its website and will publicize reporting methods at least twice a year.
	Develop and maintain procedures for responding to illicit discharges, illegal dumping and spills.	Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.	The Town will develop and maintain standard operating procedures (SOPs) for IDDE Response.
	Source investigation and elimination of illicit discharges and illegal dumping.	Respond to 100% of known illicit discharges and illegal dumping incidents each year to investigate sources	The Town will respond to 100% of reports of illicit discharges and illegal dumping.
	Corrective action to eliminate illicit discharges and illegal dumping.	For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party of the problem within 24 hours.	The Town will continue to enforce its IDDE Ordinance and hold responsible parties accountable.
	Inspection Procedures.	Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.	The Town will review its standard operating procedures and update and improve as needed.
	Inspections in response to complaints	Conduct inspections in response to 100% of complaints each year according to the established procedures.	The Town will continue to inspect 100% of complaints.

MCM	BMP	Measurable Goal	Description/Comments
4: Construction Site Stormwater Runoff Control	Develop and maintain an ordinance or other regulatory mechanism	Review and update the ordinance or other regulatory mechanism at least one time during the permit term	The Town will continue to enforce and review its Erosion and Sediment Control Ordinance.
	Prohibit discharges	Review and update the ordinance or other regulatory mechanism at least one time during the permit term	The Town will review its ordinance to make sure it meets the requirements of the permit and includes appropriate prohibited discharges.
	Maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction	Review and update site plan review procedures at least one time annually. Implement site plan review procedures for 100% of new construction site plans received each year.	The Town will continue its site plan review procedures and review the procedures annually for compliance with the permit.
	Implement procedures for inspecting large and small construction projects	Conduct inspections at 80% of active construction sites annually according to the established procedures.	The Town will continue to inspect 100% of construction sites.
	Develop, implement and maintain procedures for receipt and consideration of information submitted by the public	Maintain one webpage, hotline, or similar method for receipt of information submitted by the public throughout the permit term.	The Town will continue to provide links and phone numbers for public reporting.
	Conduct training for all the MS4 staff whose primary job duties are related to implementing the construction stormwwater program	Conduct a minimum of one training annually for 100% of MS4 staff whose primary job duties are related to implementing the construction stormwater program.	The Town will continue to provide training to relevant staff at least once a year.

MCM	BMP	Measurable Goal	Description/Comments
5: Post-Construction Stormwater Management in New Development and Redevelopment	Develop and maintain an ordinance or other regulatory mechanism	Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.	The Town will continue to enforce its ordinance and will review it at least once during the upcoming permit term.
	Document and maintain records of enforcement actions and make them available for review by the TCEQ	Maintain records of 100% of enforcement actions taken each year.	The Town will continue to maintain enforcement records and make them readily available to TCEQ upon request.
	Ensure the long term operation and maintenance of structural stormwater control measures installed	Maintain 100% of stormwater control measures each year where the MS4 operator is responsible for maintenance. Require 100% of the owners or operators of any new development or redeveloped sites to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site.	The Town will continue to maintain public stormwater control measures and enforce the maintenance of private stormwater control measures.
6. Pollution Prevention and Good Housekeeping for Municipal Operations	Permittee-owned Facilities and Control Inventory	Develop and maintain an annual inventory for 100% of the small MS4 owned and operated facilities and controls in the small MS4 area. Review and update the inventory at least one time annually	The Town will continue to maintain a list of inventory and will review and update it at least annually.
	Training and Education	Conduct a minimum of one training annually for 100% of employees involved in implementing pollution prevention and good housekeeping practices.	The Town will continue to provide training for relevant staff and Town contractors.

MCM	BMP	Measurable Goal	Description/Comments
6. Pollution Prevention and Good Housekeeping for Municipal Operations	Disposal of Waste Material	Ensure that 100% of waste from the MS4 is disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable each year.	The Town will ensure that its waste disposal is in accordance with the requirements.
	Contractor Requirements and Oversight	Each year, ensure that 100% of contractors hired by the MS4 to perform maintenance activities on permittee-owned facilities is contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures	The Town will continue to ensure that its contractors are complying with all stormwater regulations.
	Assessment of permittee-owned operations	Evaluate 100% of O&M activities for their potential to discharge pollutants in stormwater annually	The Town will continue to evaluate its facilities and activities and adjust behaviors as needed.
	Identify pollutants of concern	Identify pollutants of concern that could be discharged from all of the O&M activities.	The Town will review its prior assessments and adjust for new facilities or changes in operation and identify pollutants of concern.
	Pollution Prevention Measures	Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the permittee-owned operations. Implement at least two of the pollution prevention measures identified in the permit.	The Town will review its current implementation and ensure that it is meeting the permit requirements for pollution prevention measures on Town owner facilities.
	Inspection of Pollution Prevention Measures	At least one time annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are working properly.	The Town will inspect its facilities annually and will evaluate and adjust its inspection procedures at that time.

F. Stormwater Modifications (Part IV Section B.2.(e))

1. The SWMP and MCM implementation procedures are reviewed each year.

☒ Yes ☐ No

2. Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's review.

☐ Yes ☒ No

If "Yes" report on changes made to measurable goals and BMPs:

G. Additional BMPs for TMDLs and I-Plans

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans.

- No additional BMPs are anticipated for the Town of Copper Canyon at this time.

H. Additional Information (Part IV Section B.2.(g))

1. Is the permittee relying on another entity/ies to satisfy some of its permit obligations?

☐ Yes ☒ No

2. a. Is the permittee part of a group sharing a SWMP with other entities?

☐ Yes ☒ No

2. b. If 'yes,' is this a system-wide annual report including information for all permittees?

☐ Yes ☐ No

I. Construction Activities (Part IV Section B.2.(h-i))

1. The number of construction activities that occurred in the jurisdictional area of the MS4 (Large and Small Site Notices submitted by construction site operators). 3 .

2. Does the permittee utilize the optional seventh MCM related to construction?

☐ Yes ☒ No

2.b. If 'yes' then provide the following info for this permit year:

The number of municipal construction activities authorized under this general permit	N/A
The total number of acres disturbed for municipal construction projects	N/A

J. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Troy Meyer

Title: Town Administrator

Signature: Troy J. Meyer

Date: 3/26/2024

Town of Copper Canyon MS4

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Distribute Stormwater Educational Material***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Provide brochures to the public at Town facilities. Distribute brochures to at least one Town event each year.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☒

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town has brochures regarding lawn watering and composting available at Town Hall.

   (b) If not, why was the measurable goal not accomplished?

   The Town did not distribute materials at an event this year. The Town Administrator retired and a new Town Administrator came on board. Through that turnover, this item was overlooked.

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important to educate residents about Copper Canyon's efforts in reducing stormwater pollution. Developing and implementing the program demonstrates the Town's effort in complying with the MS4 permit in reducing stormwater pollution.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

Water Efficient Lawn Care for North Texas

By Daniel Cunningham, Patrick Dickinson, Dotty Woodson and Clint Wolfe
Illustrations and design by Gabe Saldana

Texas A&M AgriLife Research | Extension

Water University

Water Efficient Lawn Care for North Texas

Is the green in your lawn, in your weeds or in your grass? Do you have brown circles or spots in your yard? Proper lawn care is a key component to a healthy lawn. Basic lawn maintenance practices, in conjunction with the selection of the right turf grass, can improve the health, longevity and value of your landscape while utilizing less water, fertilizer and pesticides. Healthy lawns offer a variety of advantages for the home. They not only add aesthetic value, but also provide erosion control, temperature control and a usable outdoor space. But many times, they also tend to be over-watered, over-fertilized or over-applied with pesticides, which can have detrimental effects on our water resources and the overall health of the landscape. By incorporating best management practices and selecting the right turfgrass for your specific needs, you have the potential to drastically reduce water and chemical use, while saving precious time and money!

Turfgrass Selection

When selecting a new turfgrass, there are important factors to take into consideration. In areas that receive less than 5 hours of sunlight, turfgrass is not a sustainable solution. Think outside your turf box and consider shade gardening in situations like this. Certain turfgrasses, like Bermudagrass and Zoysiagrass, handle foot traffic from kids and pets better than St. Augustinegrass and Buffalograss. Some turfgrasses have higher water needs than others, so choosing the right grass may save water and money.

Remember

Big Lawns = Lots of Maintenance

When determining the size of your lawn, be mindful of the amount of work you are capable of and are willing to perform.

	Bermudagrass	Buffalograss	St. Augustinegrass	Zoysiagrass
Minimum Light Requirement	6-8 Hours	7-8 Hours	5-6 Hours	5-8 Hours
Shade Tolerance	Low to Very Low	Very Low	High	High to Moderate
Water Requirement	Moderate to Low	Very Low	Moderate	Moderate
Wearability (foot traffic, pets etc.)	High	Low	Low	High to Moderate
Disease Potential	Moderate to Low	Low	High (in shade)	Moderate to Low
Mowing Frequency	3-7 Days	Infrequent	5-7 Days	5-10 Days
Mowing Height	1-2.5 Inches	3-8 Inches	2.5-3.5 Inches	1-3 Inches

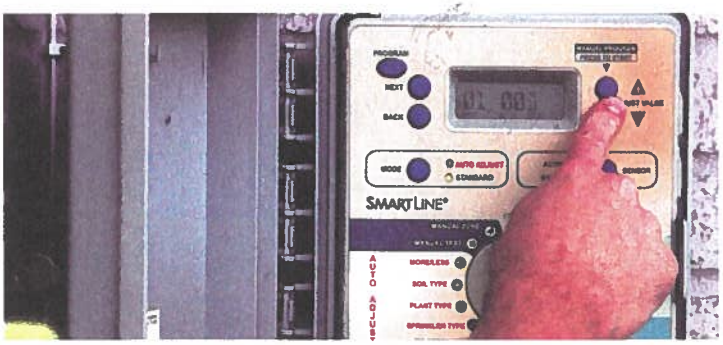
Irrigating an Established Lawn

Remember
irrigation systems (sprinkler systems) are designed to supplement the lack of rainfall. If you want to have a more sustainable lawn, you need to irrigate less often and deeper rather than more often on shorter intervals.

Visit WaterMyYard.org for weekly advice on when and how much to water.

- Water without creating runoff. **See "Cycle and Soak Method"*
- Check your irrigation system monthly for problems.
- Water only when needed, not just because it's your day to water.
- Watering in the winter is not usually necessary unless it is unusually dry.

Cycle and Soak Method



Irrigation controller box

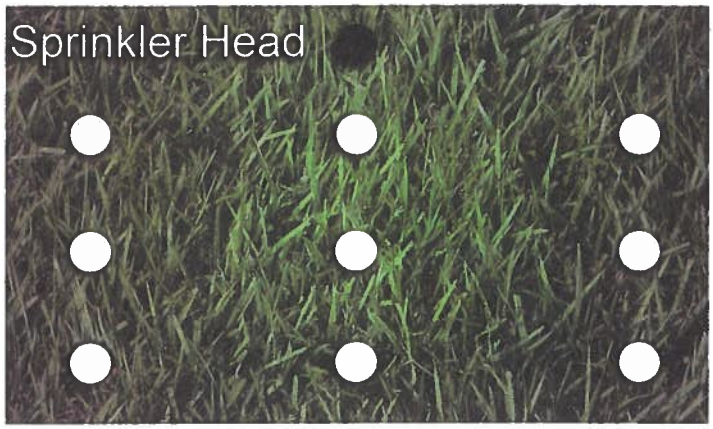
Some irrigation systems apply water faster than the ground will absorb. This is especially true in lawn areas with compacted clay soil. To avoid water running off the landscape into the street, you may need to run these stations several short times instead of one long time. Use cycle and soak method to:

1. Determine how long to run each zone. (see 'Catch Can Test')
2. Water each station in 2 or 3 short cycles instead of 1 long cycle by setting several start times.
3. Set multiple start times 30 to 60 minutes after last station runs to allow water to soak into soil between cycles.

Most irrigation controllers have a way to set different start times. If you have trouble programming your controller, visit the irrigation controller company's web site or contact their customer service for instructions for cycle and soak. Some newer controllers have a cycle and soak setting, so this may be a good time to upgrade your irrigation controller.

During the active growing season, usually March-October, it's generally better to water your lawn after 6:00 p.m. and before 10:00 a.m. to slow evaporation rates.

Conducting a Catch Can Test



This grid shows placement of catch cans in relation to a sprinkler head.

Watch our catch can test instructional on YouTube
www.tinyurl.com/agrican

A catch can test is used to determine how long to run an irrigation system or hose-end sprinkler and how well the water is distributed over the landscape. The root zone (where water and nutrient absorbing roots grow) is typically 6 inches deep in clay soil. Usually 1 inch of water will fill this root zone, but in many cases, irrigation systems apply water faster than the ground can absorb. During a summer drought with high temperatures, the water requirement may be higher. Each type of sprinkler (spray, rotors, multi-stream rotor, drip) applies water at different rates; therefore, a catch can test is essential to determine the run time and efficiency of the system. Follow the steps below to determine the runtime of your irrigation system:

1. Place 5 to 9 catch cans (tuna or cat food cans work great) in each irrigation zone or station.
2. To determine how much water is applied to each area, run each zone with spray nozzles for 5 minutes; run 10-15 minutes for zones with rotors. Measure the amount of water in each catch can at the end of the specified time.
3. To determine run time (time each station should run), use this example: if there is ¼ inch of water in each catch can after running for 5 minutes, to apply 1 inch of water, set the run time for 20 minutes **(this is just an example; your measurements could vary greatly)**. Some irrigation systems apply water faster than the ground will absorb 1 inch of the water. To avoid water running off the landscape into the street, you may need to run these stations several short times instead of one long time. With this example, set the controller to run 10 minutes 2 times. (See 'Cycle and Soak' and 'Aerate Lawn Area' for more ideas.)
4. If the water levels in the catch cans are equal or near equal, your irrigation system is working efficiently (distributing water evenly).
5. Test each zone. Water application and distribution can vary by zone.

Mowing Tips

Make sure all of your equipment is in top-notch condition for clean cuts and better performance.

- When mowing, remove no more than 1/3 of your lawn's height (leaf blade.) This may occur weekly or more often during the growing season and less frequently at other times of the year, depending on your turgrass species.
- Raise your mower. A slightly taller leaf blade helps shade the soil holding moisture. (heights vary per turf species)
- Don't bag your grass clippings! Mulching your grass clippings in place provides water and nutrients back to your lawn.
- Change your mowing pattern regularly to prevent ruts or irregular growth patterns.
- Aerating reduces compaction of heavy clay soils. Compacted soils contain less oxygen, which is critical for root growth. Aerate when the lawn is actively growing. May, June and September are good aerating months.

Reel vs. Rotary Mowers

Reel Mower

The blades of a reel mower spin vertically (north to south) and use a spinning scissoring action to cut the grass. The scissor-like cut of a sharp reel mower is healthier for the lawn; however, twigs and other debris can stop the reel mower. Reel mowers should be used on sports type Bermudagrass and some fine-blade Zoysiagrass.

Reel mower

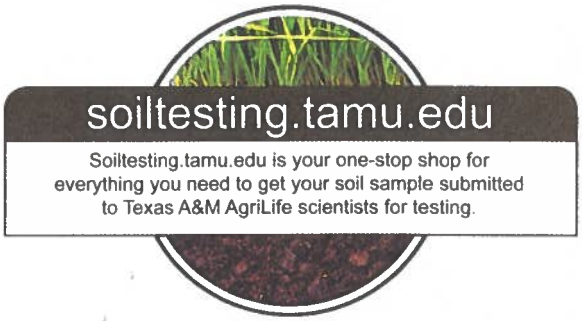
Rotary Mower

The single blade of a rotary mower spins horizontally (east to west) and uses more of a tearing action to cut the grass. Rotary mowers are typically used on Bermudagrass, St. Augustinegrass and medium-blade Zoysiagrass.

Rotary Mower

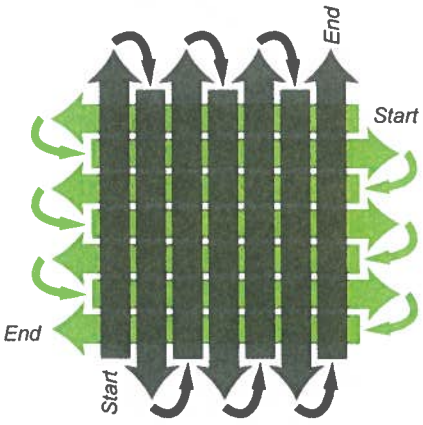
Fertilization

An important first step to fertilizing your lawn is to test your soil to determine what fertilizer is best for your lawn. Testing your soil through AgriLife is inexpensive and can help you determine what nutrients you actually need. North Texas soils may already have enough phosphorous and potassium, so a fertilizer that provides only nitrogen might be the best choice.



When purchasing fertilizer, the three numbers on the bag represent Nitrogen, Phosphorus and Potassium ratios. A well-balanced general fertilizer has a 4-1-2 ratio of nutrients. However, North Texas soils are commonly very high in potassium. Fertilizers that contain primarily nitrogen (like 21-0-0) and little to no phosphorous or potassium are often sufficient for our soils. Select a fertilizer that has slow release nitrogen. This information can be found on the back of your fertilizer bag. The fertilizers and other chemicals you apply to your landscape which go unused have the potential to leach out or wash away, wasting your money and polluting our stormwater. Fertilizer should only be applied to actively growing plant material for this reason. When applying your fertilizer, is it important to follow the label closely for safety protocols and application rates.

One recommended practice is to apply your fertilizer with a spreader at half the application rate in the first pass. Then, apply the remainder on a second perpendicular pass in a checker board pattern to ensure you do not miss any areas of your lawn. Missing areas could result in a striped pattern (example: If your fertilizer calls for you to set your spreader at an 8, set it at a 4 and apply back and forth in one direction and then again in the perpendicular direction. This provides the proper application rate with less of a chance of missed areas.)



Fertilizer spreader distribution pattern

Weeds

A weed is simply an unwanted plant or a plant growing out of place. There are different categories of weeds and proper identification helps determine the proper treatment. Herbicide treatments should always be applied per manufacturers' labeled instructions and only for the weeds you have present. Caution should be taken when applying chemicals around trees. Over applying can cause increased pollution of stormwater runoff.

Treatments

There are different categories of weed treatments. Understanding their purpose and applying them properly should be taken very seriously.

Non-Selective weed treatments are not selective of what they kill so caution should be taken to not spray the leaves of desired plants.

Selective weed treatments are specific as to what type of plant they will kill; however, caution should still be taken to not spray desired plants that the chemical may still affect.

Post-Emergent weed treatments are used to treat weeds that are already present. Apply per label instructions when weeds are green and actively growing.

Pre-Emergent weed treatments are used to stop weeds before they ever emerge from the soil; they are used to treat annual weeds. Apply pre-emergents around late September for winter weeds and around early March for summer weeds. Most pre-emergents control grassy annual weeds but might not be effective againt broadleaf weeds. As always, follow label instructions.

Weed Identification

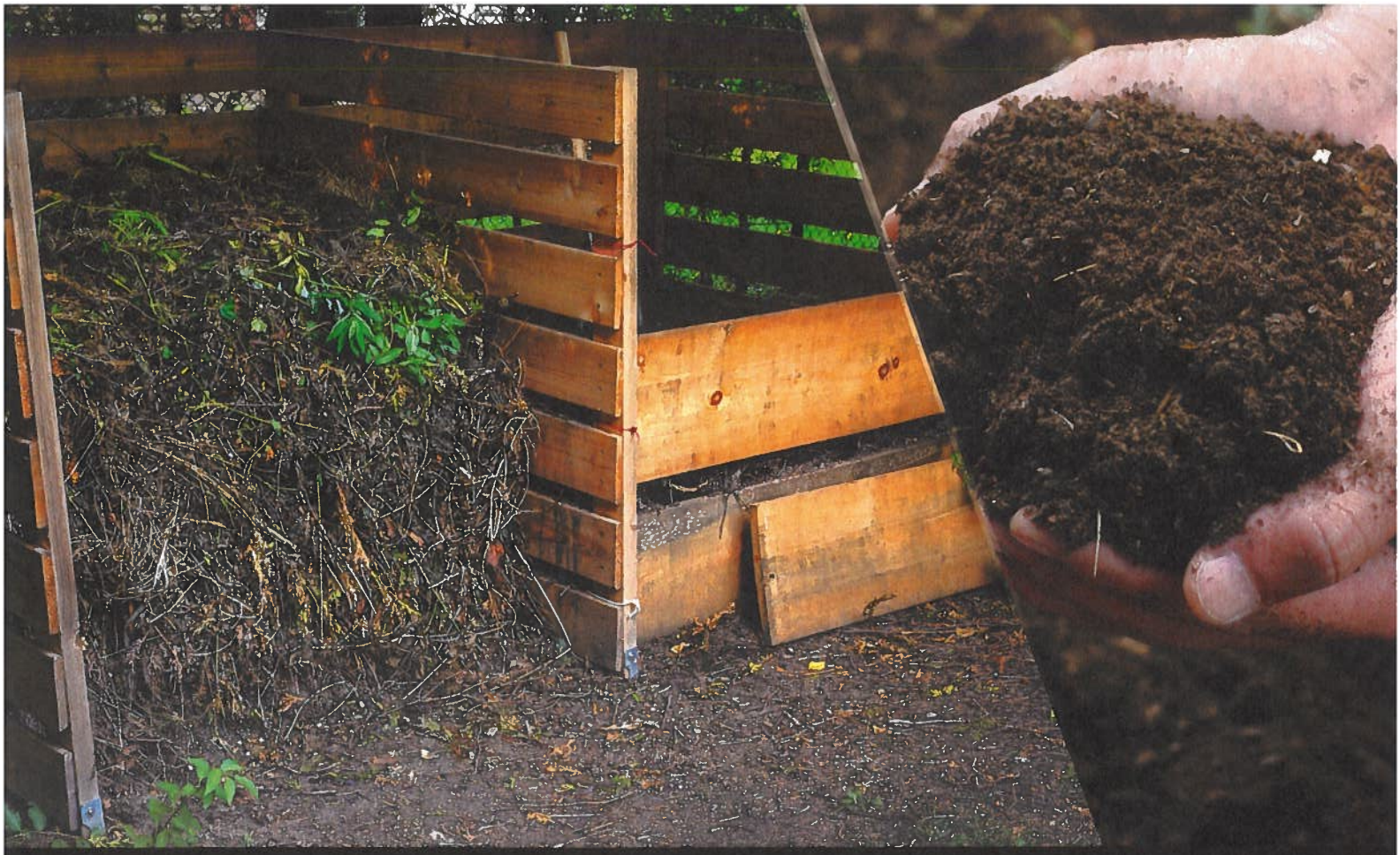
Broadleaf weeds have wider leaves with netted veins and can be identified by distinct leaf shapes depending on the species.

Grassy weeds have narrow leaves with parallel veins and round hollow stems. Seedlings can be difficult to identify, but most have similar control methods.

Sedges have narrow leaves and can look very similar to grasses, but can be easily identified by their triangular, solid stems. Sedges are also generally perennial which can affect their treatment options.

For more help identifying problem weeds in your lawn or landscape, visit us online.

aggieturf.tamu.edu/turfgrass-weeds/



Composting

Texas A&M AgriLife Research | Extension

Water University

Composting 101

Our "trash" or Municipal Solid Waste (MSW) is made up of a variety of materials that Texans throw away once used or consumed to some degree. The EPA estimates up to 30 percent of what ends up in the landfills is food scrap or yard waste that could and should be composted. Composting at home is now as important as ever due to growing population and limited land available for new landfills.

What is Composting

Composting is the process of combining organic waste (from plants) in proper ratios into piles, rows, or bins to accelerate their natural breakdown. After being allowed to cure, the result is a stable, soil-like, earthy smelling, dark brown to black material called humus. The finished product is one of the best soil amendments you can find, and plants love it! Composting is not a new process, but an important practice that's been common in civilizations all over the world for thousands of years. Many of America's founding fathers composted, including our first president, George Washington.

Infographic by the Environmental Protection Agency

Infographic by the State of Texas Alliance for Recycling

Where to Compost

Check first
Familiarize yourself with local regulations pertaining to composting. Your municipality may have a setback ordinance.

Locate conveniently
Make sure your composting area is easy to access and close to a water source.

Level it
Always compost on level ground with good drainage. Some moisture is good, but too much water is bad; it causes anaerobic conditions.

DO NOT place your compost pile directly against wooden buildings, fences, or trees, as any wood in contact with compost will decay.

Why Compost?

Composting improves soil quality and nutrition. Benefits include:

- Improved soil texture and aeration;
- Improved drainage and nutrient availability in clay soil;
- Water loss prevention and nutrient leaching in sandy soils.

Soils also require less fertilizer when compost is added because it holds moisture, which saves water AND money!

1

S.M.A.R.T. Composting

Although there are many ways to successfully produce compost, one of our favorite techniques is the Berkeley method, also known as "hot" composting. The steps are easy to remember with this helpful acronym.

Size

Size matters when trying to get your compost pile "hot." Collect materials until you have about a 4' by 4' pile. A smaller pile works, too; it just might not get as hot and might take a little bit longer.

Moisture

When building or turning your pile, be sure to add water evenly throughout and in-between layers to achieve even moisture. Adding water to the top of a pile often leaves some areas too wet and others too dry. Maintain the moisture in your compost pile so it stays as wet as a damp sponge. If you take a big handful of your material and squeeze hard, only a couple of drops of water should drip out. Any wetter and you might start to develop stinky or anaerobic conditions. Rainwater is best when you have it, but tap water works, too!

Aeration

The microorganisms in your pile that break everything down prefer an oxygen rich environment. That's why aeration might be the most important factor to successful composting. By turning your pile regularly, you provide much needed oxygen and redistribute beneficial bacteria, fungi, and other organisms. Aerating also helps to maintain equal moisture and carbon to nitrogen ratios throughout your pile. In most cases, the more you turn your pile, the quicker you achieve finished compost!

Ratios

Your C to N ratio (Carbon to Nitrogen) is important to finding a balance between our browns (materials higher in carbon) and our greens (materials higher in nitrogen) when composting. If you add too many browns, like wood chips, sawdust, or paper, you might not achieve the higher temperatures for rapid decomposition and could most likely be left with larger materials in your end product.

On the other hand, too many greens (materials higher in nitrogen), like coffee grounds or vegetable scraps, could cause temperatures that quickly rise to levels in which the important microorganisms cannot thrive, eventually slowing the composting process. A ratio of two-parts "brown" to one-part "green" by volume is ideal. One way to achieve this is to layer browns and greens while building your pile in a lasagna-type recipe, adding roughly twice as much brown material on top of a layer of green.

Temperature

Heat is also very important in rapid composting and is supplied by the respiration of the beneficial microorganisms that break down the organic material. To prevent heat loss and allow for the build up of heat, a minimum volume of 3' by 3' by 3' of material is recommended. Decomposing microorganisms function best at about 135° -165°F, and a good pile will maintain itself at about that temperature range between turnings. A probe compost thermometer is a great way to measure accurately. If temperatures get much higher than 165, it will be too hot and can rapidly cool as some decomposers begin to die off.

What to compost

Browns (higher in carbon)	Greens (high in nitrogen)
Dry leaves	Vegetable scraps
Aged hay	Fruit peels/rinds
Cardboard egg cartons	Coffee grounds
Newspaper	Tea grounds/leaves
Chipped wood	Houseplants
Dried grass	Spent flowers
Paper towels	Manure herbivores
Shredded paper	Alfalfa meal or hay
Coffee filters	Weeds that haven't gone to seed
Sawdust	Green plant prunings
Pine Needles	Bone meal
	Hair
	Feathers
	Fresh grass clippings

What to avoid

Avoid adding these materials to a backyard bin or pile:

- Meat, bones, fish or dairy products
- Grease or oil
- Weed or grass seeds
- Pest or disease infected or infested plant material

Using your compost

In a new landscape, flower bed, or garden; mix up to 2" of finished compost into the top 6" of soil.

For yearly lawn maintenance, apply 1/4" -1/2" of screened compost as a top dressing in early spring.

In established beds, apply up to 1/2" of compost once a year as a top-dressing in addition to your favorite natural mulch, maintaining 2"-4" of total mulch layer.

Utilize a 50/50 mix of sifted compost and sand to fill in low spots or bare spots in your landscape to improve drainage and reduce erosion.

For those who garden in pots, compost can be a useful component of your potting mix. A mix of equal parts compost, topsoil and sand works well for most plants.

Compost Troubleshooting

Symptom	Problem	Solution
Pile is wet and smells like rancid butter, vinegar or rotten eggs.	Not enough air or too much nitrogen or too wet.	Turn pile and add straw or wood chips. Improve drainage.
Pile does not heat up.	Pile is too small or too dry.	Make pile larger or provide insulation; add water while turning.
Pile is damp and sweet smelling, but will not heat up.	Not enough nitrogen.	Add nitrogen: mix in grass clippings, food scraps, coffee grounds.
Pile is attracting animals.	Pile contains meat or dairy products or food scraps are not covered well.	Enclose pile in 1/4" hardware cloth; cover food with brown materials: wood chips / leaves.

TEXAS A&M AGRILIFE RESEARCH | EXTENSION
WATER UNIVERSITY

17360 Coit Rd., Dallas, TX 75252
wateruniversity.tamu.edu

Developed in cooperation with the Water Efficiency Network of North Texas

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Post SWMP and Annual Report***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Post each annual report as it is available and maintain on webpage continuously until end of permit term. Respond to email comments or questions from public.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   Annual reports and the SWMP are provided on the Town's website. The Town did not receive any questions or comments about the program for Year 5.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important to educate residents about Copper Canyon's efforts in reducing stormwater pollution. Developing and implementing the program demonstrates the Town's effort in complying with the MS4 permit in reducing stormwater pollution.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

SWMP and Annual Report Website Postings

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Volunteer Cleanup Activities***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Advertise the cleanup at least once on the Town's website. Coordinate at least one annual cleanup event.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town of Copper Canyon scheduled a 2 clean up events – A Town-Wide Clean Up Day on October 7 and a Grease Roundup in December.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   The Clean-up Event reduces the amount of waste that could otherwise enter the storm drain system. Educating and involving the public can help raise awareness about stormwater pollution.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

Volunteer Cleanup Activities

COPPER CANYON TEXAS

Published on *Copper Canyon, TX* (https://www.coppercany

Home > Fall Clean Up

Fall Clean Up

Event Date:
Saturday, October 7, 2023 - 8:00am to 11:30am

CLEAN UP DAY!

RECYCLING COLLECTION EVENT- FREE DROP-OFF FOR COPPER CANYON RESIDENT'S (Proof of Residency Required)

Saturday, October 7, 2023

8:00 am to 11:30 am

Copper Canyon Town Hall, 400 Woodland Drive

HOUSEHOLD HAZARDOUS WASTE

Aerosols, Flammables, Toxic Liquids, Toxic Solids, Corrosives Acidic, Corrosive Basic, Oxidizers, Batteries, Cylinders-Propane, Paints, Used Oils, Yard Fertilizers, Pesticides - **Residential USE ONLY!**

ELECTRONIC WASTE/UNIVERSAL WASTE

Televisions, Computers, Monitors, Laptops, Handled Computers, Keyboards & Mice, Scanners/Printers/Copiers, Fax Machines, Telephones, Microwave Ovens, VCR's, CD Players, Stereos, Related Cables, Florescent Straight Tubes and Compact Lamp (CFL's)

HOUSEHOLD WHITE GOODS

Water Heaters, Washers/Dryers, Refrigerators (must be certified Freon removed), Freezers (must be certified Freon removed), Small Metal Scrap

BULKY ITEMS

Bulk includes, brush, furniture, etc.

TIRE RECOVERY

Car Tires, Light Truck Tires – **Limit 4 Tires per Household**

ON-SITE DOCUMENT DESTRUCTION

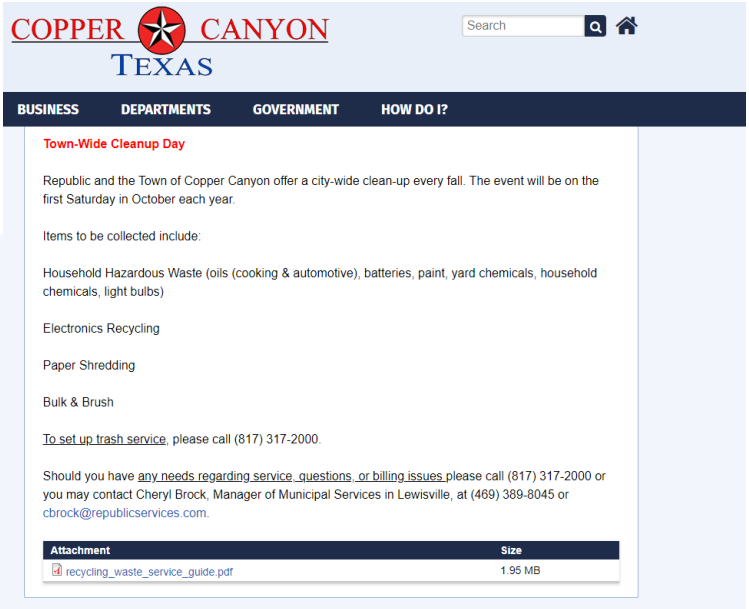
On-site secured document destruction

ITEMS NOT ACCEPTED

Ammunition, Fireworks, Explosives, Medications.

REPUBLIC

Source URL:https://www.coppercanyon-tx.org/home/events/8896



COPPER CANYON TEXAS

Search

BUSINESS DEPARTMENTS GOVERNMENT HOW DO I?

Town-Wide Cleanup Day

Republic and the Town of Copper Canyon offer a city-wide clean-up every fall. The event will be on the first Saturday in October each year.

Items to be collected include:

Household Hazardous Waste (oils (cooking & automotive), batteries, paint, yard chemicals, household chemicals, light bulbs)

Electronics Recycling

Paper Shredding

Bulk & Brush

To set up trash service, please call (817) 317-2000.

Should you have any needs regarding service, questions, or billing issues please call (817) 317-2000 or you may contact Cheryl Brock, Manager of Municipal Services in Lewisville, at (469) 389-8045 or cbrock@republicservices.com.

Attachment	Size
recycling_waste_service_guide.pdf	1.95 MB

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Illicit Discharge Ordinance***
Responsible Department:	Town Administrator and Town Engineer
Measurable Goal:	Year 5 – Inspect 100% of illicit discharges located or reported. Provide point of contact to received reports of illicit discharges. Investigate 100% of complaints or reports received.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐
   (a) If so, explain what was done to accomplish the measurable goal.

   In Year 5, there was one complaint of illegal dumping on August 8, 2023. The drainage pond at Clair Ct. was dredged and the dirt, silt and organics were piled on a vacant property to dry before being hauled. An adjacent homeowner complained, the contractor was contacted, and the material hauled off and the property cleaned.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   Adopting the illicit discharge ordinance allows the Town to prevent any non-stormwater discharges, and illegal dumping, and take actions of enforcement on any issues that may arise.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒
   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Dry Weather Screening***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Visually inspect culvert crossings once per year.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☒

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town did not conduct dry weather screening in 2023, but it was conducted on March 6, 2024. Dry weather screening is not required as a part of the TCEQ permit for Copper Canyon, but the Town included it in its program in order to exceed goals and ensure that their storm drain infrastructure was inspected once a year since they do not have much staff. The Dry Weather Screening Report is available at Town Hall.

   (b) If not, why was the measurable goal not accomplished?

   The goal was not accomplished within the reporting period due to staff turnover (they have a new Town Administrator) and maternity leave of the previous report preparer during the time the screening normally occurred.

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   The inventory checklist developed by the Center for Watershed Protection is a comprehensive water quality review form and has several stormwater quality criteria to assist with the dry weather screening. The dry weather screening is an effective way to identify potential pollutant discharges to the MS4.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Storm Sewer Map***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Annually update the storm drainage system map.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   No new development was accepted in 2023, so the outfall map is the same as prior years. The current storm sewer has 37 outfalls mapped. The outfall map will be updated with new development and redevelopment as necessary.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

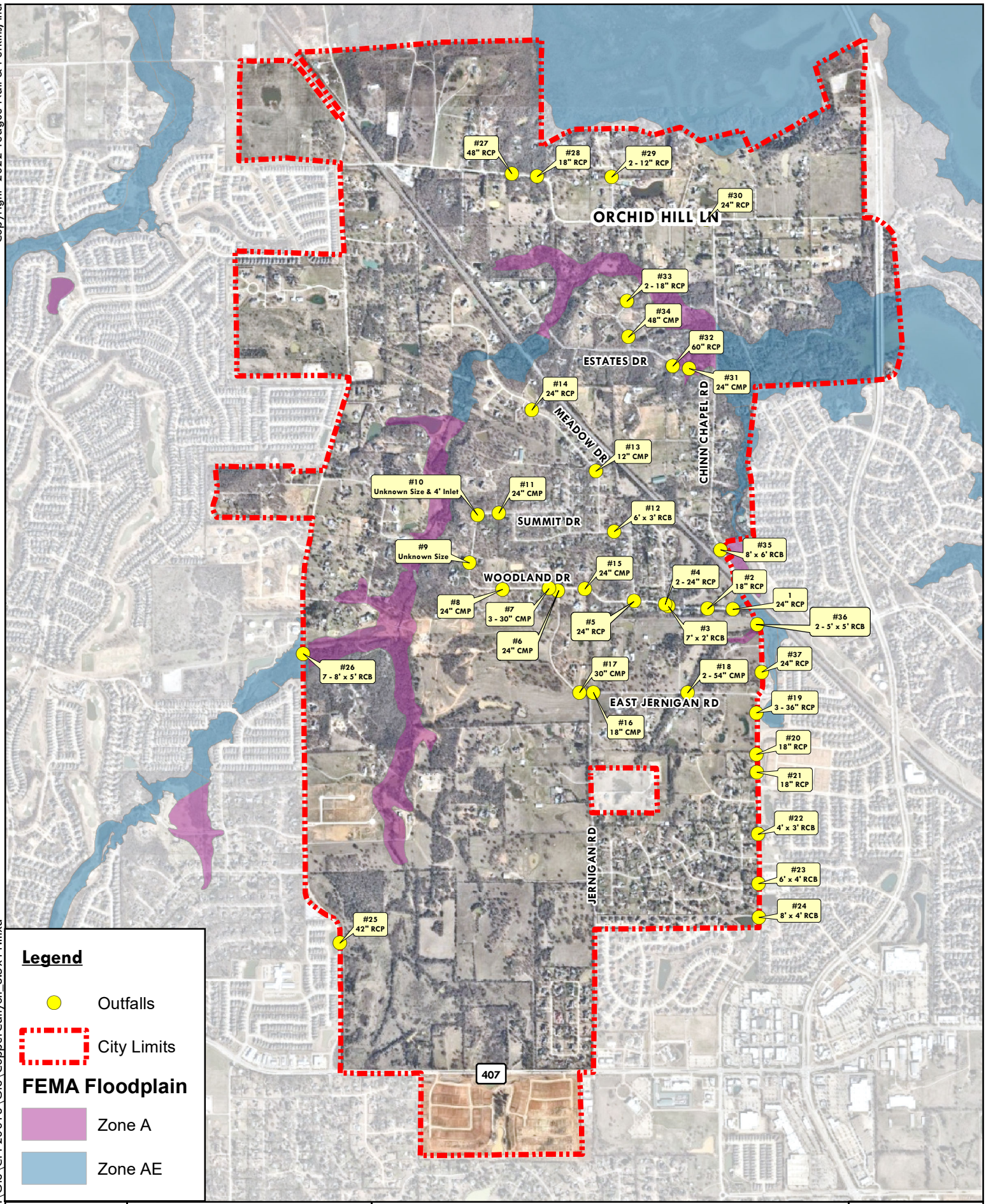
   (a) Please explain.

   The Town has successfully mapped 100% of the Town outfalls. The map can be used to track location of illicit discharges within the Town.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒



Legend

- Outfalls
- City Limits

FEMA Floodplain

- Zone A
- Zone AE

tnp
TNP# XXX#####
Date Saved: 5/26/2022

N

0 1,000 2,000
1 inch = 2,000 feet

Copper Canyon, Texas

TOWN OF COPPER CANYON OUTFALL MAP

March 2023

COPPER CANYON TEXAS

Document Path: O:\GIS\CPP2001 3\GIS\CopperCanyon_8.5x11.mxd

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Education and Training on Illicit Discharges***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Provide annual IDDE training at least once a year for designate Town staff and new hires.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town staff is comprised of 3 staff members and primarily uses third party contractors for stormwater services. The Town Engineer (contract) has attended training in the past and is now training his staff so that they can assist in IDDE tasks as well as construction review and inspection. He used TCEQ online training documents to provide the training.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   Training educates Town employees on how to identify any possible illicit discharges and how to resolve them. Knowing how to respond when discharges happen can result in minimizing pollution to lakes and streams.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Erosion and Sediment Control Ordinance***
Responsible Department:	Town Administrator and Town Engineer
Measurable Goal:	Year 5 –Inspect 100% of construction sites each year. Inspect 100% of complaints regarding construction sites each year.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Erosion and Sediment Control Ordinance was adopted in 2014 under the last permit term. The Town has inspected 100% of active construction sites. In 2023, one new development, Williams Ranch, was under construction. The Town also performed quarterly inspections of developments where new homes were being constructed – Boots Ranch and Copper Creek.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important for the Town to be able to enforce the requirements for erosion and sediment control on construction sites. Proper stormwater practices on construction sites reduces the amount of pollution from site runoff.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

Construction Sites Inspected

Williams Ranch

Completed Development/Home Construction

Quarterly Inspections

Boots Ranch

Copper Creek

Construction Inspections are retained onsite at Town of Copper Canyon Town Hall.

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Construction Site SWPPP Review***
Responsible Department:	Town Administrator and Town Engineer
Measurable Goal:	Year 5 – Administer the construction plan review process for 100% of new regulated construction projects.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town continues to administer the construction plan review process for 100% of new regulated construction projects. In 2023, there were no new construction plans or SWPPPs submitted for review.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important to ensure the new developments or redevelopments contain appropriate site-specific construction site control measures.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Construction Site Inspections***
Responsible Department:	Town Administrator and Town Engineer
Measurable Goal:	Year 5 – Inspect 100% of construction sites each year. Inspect 100% of complaints regarding construction sites each year.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town has inspected 100% of active construction sites. In 2023, one new development, Williams Ranch, was under construction. The Town also performed quarterly inspections of developments where new homes were being constructed – Boots Ranch and Copper Creek.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important to ensure active construction sites are implementing the erosion and sediment controls in order to prevent pollutants from entering the storm drains and waterways during active construction.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

Construction Sites Inspected

Williams Ranch

Completed Development/Home Construction

Quarterly Inspections

Boots Ranch

Copper Creek

Construction Inspections are retained onsite at Town of Copper Canyon Town Hall.

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Construction Stormwater Training***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Provide annual construction stormwater training at least once a year for designated Town staff and new hires.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town staff is comprised of 3 staff members and primarily uses third party contractors for stormwater services. The Town Engineer (contract) has attended training in the past and is now training his staff so that they can assist with construction site inspection as well as review and IDDE tasks. He used TCEQ online training documents to provide the training.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important for construction site procedures to enforce the Town ordinance in order to ensure proper stormwater practices on construction sites.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Contractor Comment***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Address 100% of complaints or comments received from construction contractors.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Town provides a contact number on the Town website for contractors and the public to comment about proper stormwater practices during active construction sites. There were no pre-construction meetings in 2023.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   Providing contractors, a contact number to discuss stormwater issues allows for staff to address comments ensuring construction requirements are met.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Post – Construction Stormwater Management in New Development and Redevelopment**
BMP Title:	***Post-Construction Stormwater Requirement***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Investigate 100% of post-construction violations or complaints.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐

   (a) If so, explain what was done to accomplish the measurable goal.

   The Post-Construction Stormwater requirement was adopted in 2014 under the last permit term. Currently, there are no post-construction BMPs to inspect. The Town has very limited new development. Williams Ranch is currently under construction and will have 2 detention ponds. Maintenance of the ponds is the responsibility of the developer, initially, and then will become the responsibility of the HOA once enough homes are constructed to make an HOA feasible.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐

   (a) Please explain.

   It is important the Town be able to enforce the post-construction requirements for new development, and renewed development sites, so that stormwater pollutants are reduced for long term and that the post-construction controls work properly.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Post – Construction Stormwater Management in New Development and Redevelopment**
BMP Title:	***Long-Term Maintenance of Post-Construction Stormwater Control***
Responsible Department:	Town Administrator and Town Engineer
Measurable Goal:	Year 5 – Implement maintenance plans for 100% of new owners or operators once post-construction BMPs is installed.

1. Was the measurable goal accomplished for this permit year? Yes ☐ No ☒
   (a) If so, explain what was done to accomplish the measurable goal.

   (b) If not, why was the measurable goal not accomplished?

   The Post-Construction Stormwater requirement was adopted in 2014 under the last permit term. The Town drafted a long-term maintenance agreement for new owners/operators for post-construction BMPs and is still in the process of developing long-term maintenance plans.

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   It is important the Town be able to enforce the post-construction requirements for new development, and renewed development sites, so that stormwater pollutants are reduced for long term and that the post-construction controls work properly.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒

   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

STATE OF TEXAS §
§ DETENTION FACILITY MAINTENANCE AGREEMENT
COUNTY OF DENTON §

This Detention Facility Maintenance Agreement ("Agreement") is made as of the Effective Date by and between the Town of Copper Canyon ("Town"), a Texas home rule municipality, and _____ ("Owner"), a _____. Town and Owner are collectively referred to herein as "Parties" and separately as Party.

RECITALS

WHEREAS, Owner is the owner of the property described and depicted on **Exhibit A**, attached hereto and incorporated herein by reference ("the Property"); and,

WHEREAS, Owner desires to develop the Property and has prepared and submitted to Town an application to subdivide the Property into two or more lots pursuant to Town's subdivision regulations, said development to be known as _____, an addition to the Town of Copper Canyon, Texas ("the Development"); and

WHEREAS, in order to comply with Town's ordinances and design standards relating to the drainage of surface water in association with the Development, Owner proposes to dedicate to Town a drainage easement which extends around a detention area, as shown on **Exhibit B**, attached hereto and incorporated herein by reference ("the Detention Facility"); and

WHEREAS, the Parties desire to set forth their agreement relating to the maintenance and operation of the Detention Facility;

NOW, THEREFORE, in consideration of TEN DOLLARS ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Upon completion of construction in accordance with the plans and specifications approved by Town, Owner shall maintain at Owner's sole cost and expense the Detention Facility and associated area in the drainage easement depicted on **Exhibit A** in accordance with the Town's ordinances and regulations, as amended from time to time. Such maintenance shall include, but not be limited to, mowing of grass, weeds, and other vegetation to a proper height in accordance with applicable ordinances, removal of trash, debris, and other waste materials, including dead animals, and the removal of silt, dirt, and other accumulation of materials from time to time so that the Detention Facility continues to receive, retain, and drain surface water at the rate and at the volumes set forth in the original Town-approved plans for the Detention Facility.

If water is retained in the Detention Facilities due to lack of maintenance, the stagnant water must be treated to control mosquito infestation in accordance with the Town's current requirements.

_____
Initial

The Town shall require that operation and maintenance performed in the Detention Facility is documented and retained on site, such as at the offices of the Owner or operator, and made available for review by the Town upon request.

2. Owner grants to Town and its authorized contractors, agents and employees the right to enter upon and cross the Property for the purpose of providing ingress and egress to, and inspecting the Detention Facility and associated area in the drainage easement to determine compliance with City's ordinances, and to verify the safe and proper operation of the Detention Facility and associated area in the drainage easement.

3. If Owner fails or refuses to correct any deficiencies, perform any maintenance, or make any repairs and/or improvements to the Detention Facility and/or associated areas, which are necessary in the reasonable opinion of Town to (a) bring the Detention Facility into compliance with Town's then current property maintenance standards for such facilities or (b) to perform such work as necessary to return the Detention Facility to a condition where it functions in accordance with the original Town-approved design for receipt, detention, and drainage of surface waters, within 60 days after being directed in writing by Town to correct such deficiencies, perform such maintenance, or make such repairs and/or improvements, then Town may, but is not required to, enter in and upon the Detention Facility, inspect, and correct such deficiencies, perform such maintenance and/or make such repairs and/or improvements or cause same to be done on behalf of and at the expense of Owner. Town shall invoice Owner for the cost of such work and Owner shall pay said costs not later than thirty (30) days after receipt of such invoice. If Owner fails to timely remit payment to Town for said work, Town may impress a priority lien for the cost of such work upon the Property in order to secure reimbursement for such cost to Town. Such lien shall be perfected by filing in the office of the County Clerk of Denton County, Texas, an affidavit identifying the Property to be charged with such lien, stating the amount thereof, and making reference to this Agreement. Owner hereby acknowledges and agrees that the Detention Facility constitutes an improvement necessary for the use and development of the Property and the work performed to operate, maintain, and repair the Detention Facility shall be deemed to constitute improvements to the Property generally. In addition to the right to place a lien on the Property or any portion thereof, Town shall have the right to seek and enforce any and all other remedies available to it by law, including specific performance.

4. Owner hereby agrees to indemnify, hold harmless and defend Town, its officers, employees, and agents, from and against all costs, expenses, losses, damages, claims or causes of action whatsoever arising, or which might arise, from the failure of Owner or any future owners of all or any portion of the Property to maintain the Detention Facility and associated areas in accordance herewith, or as a result of any damages caused to person or property (real or personal) due to (1) flooding of the Detention Facility and/or any related components, (2) slope failure of any part of the Detention Facility, and/or (3) any failure of the Detention Facility to operate in a manner consistent with its design purpose and/or Town criteria hereunder resulting in claims for the flooding of the Property of other real property located up-gradient or down-gradient of the Detention Facility. Initial

5. Notwithstanding Town's approval of the plans and specifications for the Detention Facility in association with subdivision and development of the Property, Town shall bear no responsibility as to the design, operation and/or maintenance of the Detention Facility nor shall Town be held liable for any costs, expenses, losses, damages, claims or causes of action arising from any negligent act of Owner in the design, operation or maintenance of the facility.

6. Owner covenants and agrees that no habitable building shall be erected within the Detention Facility or drainage easement depicted on **Exhibit B**, but this paragraph shall not preclude construction of other improvements within the drainage easement that do not impede drainage subject to written approval of the Town Manager or designee, which shall not be unreasonably withheld.

7. Owner covenants and agrees that no habitable building shall be erected on any portion of the Property abutting the drainage easement which shall have a finished floor at an elevation less than that designated by the Engineer of Record for the Development, which finished floor shall not be lower than the maximum design depth of the water which may be retained in the Detention Facility.

8. The provisions of this Agreement are hereby declared covenants running with the Property and are fully binding on Owner and each and every subsequent Owner of all or any portion of the Property but only during the term of such party's ownership thereof (except with respect to defaults that occur during the term of such person's ownership) and shall be binding on all successors, heirs, and assigns of Owner which acquire any right, title, or interest in or to the Property, or any part thereof. Any person who acquires any right, title, or interest in or to the Property, or any part hereof, thereby agrees and covenants to abide by and fully perform the provisions of this Agreement with respect to the right, title or interest in such Property, but only during the period of its ownership of such interest in the Property. Owner and every subsequent owner of any portion of the Property shall be jointly and severally liable to Town for the obligations of Owner as set forth in this Agreement for all obligations of Owner that accrue during its ownership. It shall be the sole responsibility of Owner and all subsequent owners of the Property or any portion thereof to establish amongst themselves any covenants, restrictions, and/or agreements setting forth the apportionment of costs for operating, maintaining, and/or repairing the Detention Facility as required by this Agreement and the responsibility for performing any such work. Notwithstanding any such covenants, restrictions, or agreements, Town shall have the right to seek enforcement of the obligations set forth in this Agreement against one, some, or all of such owners of the Property or any portion thereof.

9. Owner acknowledges that by entering into this Agreement, Owner, its successors, assigns, vendors, grantees, and/or trustees, shall not construe any language contained herein or in any Exhibits attached hereto as a waiver by Town of any of the requirements of the Town's Comprehensive Zoning Ordinance, as amended, City's Subdivision Ordinance, as amended, or any other Town ordinance as may be amended or adopted from time to time.

_____
Initial

10. Owner has been represented, or has been provided an opportunity to be represented, by legal counsel in the negotiation of this Agreement and has been advised, or has had the opportunity to have legal counsel review this Agreement and advise Owner, regarding Owner's rights under Texas and federal law. Owner hereby waives any requirement that Town retain a professional engineer, licensed pursuant to Chapter 1001 of the Texas Occupations Code, to review and determine that the exactions, if any, required by Town in this Agreement, if any, as a condition of development approval, including the terms of this Agreement, are roughly proportional or roughly proportionate to the anticipated impact of Owner's development. Owner specifically reserves its right to appeal the apportionment of municipal infrastructure costs in accordance with § 212.904 of the Texas Local Government Code; however, notwithstanding the foregoing, Owner hereby waives and releases Town from any and all liability under § 212.904 of the Texas Local Government Code, as amended, regarding or related to the cost of those municipal infrastructure improvements required by this Agreement. This Paragraph shall survive the termination of this Agreement.

11. To the extent allowed by law, Owner hereby waives any federal constitutional claims and any statutory or state constitutional takings claims under the Texas Constitution and Chapter 395 of the Texas Local Government Code in regard to this Agreement. Both Owner and Town further agree to waive and release all claims one may have against the other related to any and all rough proportionality and individual determination requirements in this agreement, if any, mandated by the United States Supreme Court in *Dolan v. Town of Tigard*, 512 U.S. 374 (1994), and its progeny, as well as any other requirements of a nexus between development conditions and the projected impact of the terms of this Agreement. Owner further acknowledges that the benefits of zoning and platting have been accepted with full knowledge of potential claims and causes of action which may be raised now and in the future, and Owner acknowledges the receipt of good and valuable consideration for the release and waiver of such claims. This Paragraph shall survive the termination of this agreement.

12. The signatories hereto shall be subject to all ordinances of Town, whether now existing or in the future arising. This Agreement shall confer no vested rights on the property made subject to this Agreement, or any portion thereof, unless specifically enumerated herein. In addition, nothing contained in this Agreement shall constitute a "permit" as defined in Chapter 245, Texas Local Government Code, and nothing in this Agreement provides Town with fair notice of Owner's project. This Paragraph shall survive the termination of this Agreement.

13. In the event any section, subsection, paragraph, sentence, phrase or word herein is held invalid, illegal or unconstitutional, the balance of this Agreement shall be enforceable and shall be enforced as if the parties intended at all times to delete said invalid section, subsection, paragraph, sentence, phrase or word.

14. The validity of this Agreement and any of its terms and provisions, as well as the rights and duties of the parties, shall be governed by the laws of the State of Texas; and venue for any action concerning this Agreement shall be in State District Court of Denton County, Texas. The Parties agree to submit to the personal and subject matter jurisdiction of said court.

_____
Initial

15. This Agreement embodies the complete agreement of the Parties, superseding all oral or written, previous and contemporary agreements between the parties and relating to the matters in this Agreement, and except as otherwise provided herein cannot be modified without written agreement of the parties to be attached to and made a part of this Agreement.

16. The determinations recited and declared in the preambles to this Agreement are hereby incorporated herein as part of this Agreement.

17. All exhibits to this Agreement are incorporated herein by reference for all purposes wherever reference is made to the same.

18. This Agreement shall become effective on the later (a) the last date when this Agreement bears the signatures of authorized representatives of the Parties hereto and (b) the recording of the Final Plat of the Property dedicating the drainage easement and establishing the area of the Detention Facility.

(signatures on following pages)

_____
Initial

SIGNED AND AGREED THIS _____ DAY OF _____, 20___.

OWNER

_____
By: _____

Its: _____

THE STATE OF TEXAS §

COUNTY OF _____ §

Acknowledged before me**,** the undersigned authority, this ___ day of _____, 20___, by _____, the _____, of _____, a _____ for and on behalf of said _____.

_____
Notary Public, State of Texas

_____
My Commission Expires:

TOWN OF COPPER CANYON

By:_____
_____, Town Manager

THE STATE OF TEXAS §
§
COUNTY OF DENTON §

Acknowledged before me, the undersigned authority, this __ day of _____, 201__, by _____, Town Manager, Town of Copper Canyon, a Texas home rule municipality, for and on behalf of said municipality.

_____
Notary Public, State of Texas

_____
My Commission Expires:

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention and Good Housekeeping**
BMP Title:	***Appropriate Stormwater Pollution Prevention Controls***
Responsible Department:	Town Administrator
Measurable Goal:	Year 5 – Inspect 100% of municipal operations and maintenance activities each year.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐
   (a) If so, explain what was done to accomplish the measurable goal.

   The Town has conducted an annual inspection of the Town Hall property. Republic Services disposes or recycles waste from Town hall.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   Inspecting Town hall and implementing pollution prevention measures can reduce stormwater pollution within the MS4 facilities.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒
   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention and Good Housekeeping**
BMP Title:	***Properly Dispose of Waste***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Implement procedures to remove and properly dispose of waste at 100% of municipal facilities.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐
   (a) If so, explain what was done to accomplish the measurable goal.

   The Town has researched and drafted procedures to remove and properly dispose of waste at Town facilities.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   Implementing procedures to properly remove and dispose of waste can reduce the amount of debris that can enter local waterways.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒
   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

STORMWATER BMPS: WASTE MANAGEMENT AND DISPOSAL

AFFECTED FACILITIES

These BMPs apply at all municipal and county facilities and operations in the field where any waste, scrap, trash or debris is generated.

BACKGROUND

Improper storage and handling of solid or liquid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids and other pollutants to enter storm water runoff and snow melt. The discharge of pollutants to storm water from waste handling and disposal can be prevented and reduced by proper storage, handling and management of waste. Reducing waste generation, source reduction, re-use and recycling can also reduce the potential for storm water pollution.

BEST MANAGEMENT PRACTICES

- Keep all trash container lids closed at all times unless adding or removing material.
- All waste receptacles (dumpsters or cans) should be leak-tight with tight-fitting lids or covers. Plastic liners can be used to ensure leak tightness. Return leaking dumpsters to the owner for replacement.
- Never place liquids or liquid-containing wastes in a dumpster or trash receptacle.
- Do not place outdoor waste receptacles near storm drains or ditches unless at a lower elevation.
- Place waste receptacles indoors or under a roof or roof overhang whenever possible.
- Sweep up around outdoor waste containers regularly and immediately before any expected storm event.
- Arrange for wastes to be picked up regularly and disposed at approved disposal facilities. If waste generation exceeds the capacity of waste containers, either obtain more containers or increase the frequency of pick-ups.
- Do not wash out waste containers or dumpsters outdoors. Return dumpsters to the owners for cleaning at the owner's facility. If municipally owned containers must be washed, do so at a sink or floor drain so that wastewater goes to the sanitary sewer.
- When working in the field, place all wastes in appropriate containers in the vicinity of the work site. If no public containers are available, containerize or bag the wastes and bring them back to base for proper placement into containers.
- If wastewater, liquid or liquid, non-hazardous waste is generated at a fixed facility or in the field, it must be disposed into the sanitary sewer (if approved) or collected for transportation to a disposal site that can receive that type of wastewater.

REQUIRED STRUCTURES AND EQUIPMENT

- All dumpsters and outdoor waste containers should be leak-tight and equipped with covers. This includes roll-off dumpsters that contain trash or liquid materials that may leak.
- Mark any storm drain inlets at fixed municipal facilities with the "Keep It Clean Storm Drain" marker to notify employees not to dispose of any materials or wastes there.

INSTALLATIONS REQUIRED DURING NEW CONSTRUCTION OR RENOVATION

- Design new or renovated facilities with waste or trash accumulation areas indoors or under cover and bermed to contain run-off.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.

REQUIRED EMPLOYEE AND CONTRACTOR TRAINING

- Train all current employees and contractors whose work outdoors generates any waste, scrap, debris or trash on this BMP.
- Train all new hires and job transferees whose work outdoors will generate any waste, scrap, debris or trash on this BMP.
- Conduct refresher training on this BMP for all employees and contractors as needed.
- All contracts must stipulate that contracted employees are trained in stormwater pollution prevention BMPs.
- Train all employees and contractors who might be required to clean up a spill or leak on proper spill clean-up procedures. See *BMP: Spill Clean Up.*
- Train all employees and contractors who work outdoors on good housekeeping and proper storage. (See *BMPs: Good Housekeeping & Spill Prevention* and *Outdoor Container Storage,* and *Food Service & Waste Handling*.)

REQUIRED MAINTENANCE

- Repair, replace or return any leaking or damaged dumpsters to the waste managemtn company promptly.
- Repair or replace missing or poorly fitted lids or covers on waste receptacles promptly.

RECORDS

- Keep records of all employees trained.
- Keep records on all wastes disposed: hazardous waste manifests, trash removal statements (bills), receipts or invoices from recyclers.

REFERENCES

1. Colorado's Phase II Municipal Guidance, October 2001

2. *California Stormwater BMP Handbook*, January 2003

3. *Knoxville (TN) BMP Manual, Activities & Methods*, January 2001

4. *City of Tacoma: Surface Water Management Manual (Vol. IV Source Control BMPs)*, January 2003

5. *Municipal Facility Runoff Control Plan* (City of Lakewood, CO)

6. *Best Management Practices for Industrial Storm Water Pollution Control* (Santa Clara Valley, CA)

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention and Good Housekeeping**
BMP Title:	***Contractor Requirements and Oversight***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Implement contract requirements to 100% of new contractors.

1. Was the measurable goal accomplished for this permit year? Yes ☐ No ☒
   (a) If so, explain what was done to accomplish the measurable goal.

   (b) If not, why was the measurable goal not accomplished?
   The Town has drafted contractual requirements for Town-hired contractors. Copper Canyon plans to start using this letter in 2024.

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐

3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.
   Implementing contractual requirements to contractors subject to stormwater requirements will ensure that contractors are using the appropriate control measures and standard operating procedures when working within the MS4.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒
   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒

Date

Contractor Company Name
Street Address
City, State, Zip Code

RE: Contractual Terms & Conditions

To Whom It May Concern:

As a current contract vendor with the Town of Copper Canyon (Town), you are hereby notified that the following has been adopted by the Town and included in the Standard Terms & Conditions:

- **COMPLIANCE WITH HEALTH, SAFETY, AND ENVIRONMENTAL REGULATIONS:** The Contractor, it's subcontractors, and their respective employees, shall comply fully with all applicable federal, state, and local health, safety, and environmental laws, ordinances, rules and regulations in the performance of the services, including but not limited to those promulgated by the Town and by the Occupational Safety and Health Administration (OSHA). In case of conflict, the most stringent safety requirement shall govern. The Contractor shall indemnify and hold the Town harmless from and against all claims, demands, suits, actions, judgments, fines, penalties and liability of every kind arising from the breach of the Contractor's obligations under this paragraph.

- **ENVIRONMENTAL PROTECTION:** The Contractor shall be in compliance with all applicable standards, orders, or regulations issued pursuant to the mandates of the Clean Air Act (42 (U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.).

We ask all vendors to self-audit your procedures and policies, as well as any sub-contractors, so that these conditions are met while working on any Town property or project.

If you have any questions, please contact our office at (Phone number).

Sincerely,

COPPER CANYON TEXAS

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention and Good Housekeeping**
BMP Title:	***Municipal Employee Training Program***
Responsible Department:	Town Engineer
Measurable Goal:	Year 5 – Provide annual municipal employee training at least once a year for designated staff and new hires.

1. Was the measurable goal accomplished for this permit year? Yes ☒ No ☐
   (a) If so, explain what was done to accomplish the measurable goal.

   The Town staff is comprised of 3 staff members and primarily uses third party contractors for stormwater services. The Town Engineer (contract) has attended training in the past and is now training his staff so that they can assist with site inspection as well as review and IDDE tasks. He used TCEQ online training documents to provide the training.

   (b) If not, why was the measurable goal not accomplished?

2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   It is important that Town staff is educated on stormwater pollution, so that Town activities for Operation and Maintenance do not contribute to any pollution to the storm drains. Informing staff about common pollutant to stormwater and proper practices, can help reduce stormwater pollutants by identifying any problems as soon as they arise.

4. Are any changes to this BMP recommended for the next permit term? Yes ☐ No ☒
   (a) If so, please explain.

5. Will a Notice of Change (NOC) be issued for this BMP? Yes ☐ No ☒