Phase II MS4 Annual Report

for the

CITY OF Forest Hill
COMMUNITY DRIVEN

Stormwater Management Program
Year 5
(January 1, 2023 – December 31, 2023)
Permit Authorization Number: TXR040091

TCEQ

Texas Commission on Environmental Quality

March 2024

Prepared By

tnp

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FOR 23210

Phase II MS4 Annual Report Form
TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040091

Reporting Year: 5

Annual Report Year: Calendar Year

Beginning and End Date: January 1, 2023 to December 31, 2023

MS4 Operator Level: Level 2

Name of MS4/Permittee: City of Forest Hill

Contact Name: Mr. Roberto Duenes, Public Works Director

Telephone Number: 817-531-5700

Mailing Address: 3101 Horton Road
Forest Hill, TX 76119

Email Address: rduenes@foresthilltx.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 meeting 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.).	☒	☐	Forest Hill meets the eligibility requirements of the permit.
Permittee conducted an annual review of its SWMP in conjunction with preparation of the annual report.	☒	☐	Forest Hill conducted an annual review of the City's 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	General Education Program	Yes, educating citizens, including adults and children, is an important part of reducing stormwater pollution by raising awareness of everyday issues that can be easily remedied.
1	Municipal Employee Training Program	Yes, educating employees on illicit discharge, construction site stormwater, pollution prevention and good housekeeping practices can reduce stormwater pollution.
1	Business Education Program	Yes, informing local businesses on proper waste disposal can reduce pollutants discharge into lakes and streams.
1	Texas Smartscape Program	Yes, the program provides information for homeowners and commercial businesses to use native and adaptive plants. Not only does this conserve water, but it reduces the amount of fertilizers, pesticides, and herbicides that are discharged into stormwater.
1	Fertilizer and Pesticide Use Education	Yes, educating residents on the proper use of fertilizer and pesticide can help reduce stormwater pollution during lawn care activities.
1	Post SWMP and Annual Report on City Website	Yes, posting the SWMP and annual report can educate residents of the importance of the program.
1	Review the SWMP and MCM Implementation Procedures	No, however, it is important to review the program annually to ensure program is clear specific and measurable.
1	Clean City Commission	Yes, getting the public involved in the cleanup activities can educate residents the importance of preventing stormwater pollution.
1	Citywide Litter Cleanup	Yes, the program reduces the amount of trash in streams in the City.
2	Storm Sewer Map	Yes, the map allows the City to easily track and remedy illicit discharges, should they occur.
2	Public Reporting	Yes, providing a mechanism for residents to report illicit discharges expedites the City's ability to locate and address illicit discharges.
2	Spill Control and Response	Yes, it is important for City staff to be informed on how to response to a spill or an illicit discharge.
2	Ordinance for Illicit Discharge Detection and Elimination	Yes, the ordinance allows the City to regulate and enforce rules on non-stormwater discharges and illegal dumping and prevent stormwater pollution.
2	Sanitary Sewer Inspections and Maintenance	Yes, by inspecting and tracking sanitary sewer operations, the number of sanitary sewer overflows into waterbodies can be reduced.

MCM	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.
2	Illicit Discharge Inspections	Yes, inspecting City outfalls and storm drain can lead to the detection of illicit discharges and allows for periodic monitoring.
3	Ordinance for Construction Site Stormwater Runoff Control	Yes, by allowing the City to regulate erosion and sediment control on construction sites, pollutants from stormwater runoff are reduced.
3	Site Plan Review Process	Yes, by ensuring that construction sites are enacting appropriate erosion and sediment control BMPs.
3	Construction Site Inspections and Enforcement	Yes, performing site inspections will ensure proper installation and maintenance of erosion and sediment controls and reduce transport of sediment load.
4	Ordinance for Post-Construction Stormwater Management	Yes, by allowing the City to regulate post development plans and ensure long-term water quality.
4	Post-Construction Inspections	Yes, performing site inspections ensures proper installation of post-construction controls.
5	Inventory of City Facilities	Yes, maintaining an inventory of City-owned facilities and stormwater controls identifies facilities and controls of concern in order to establish pollution prevention measures and sources of pollution.
5	Waste Disposal Procedures	Yes, proper waste disposal can reduce pollutants discharge into lakes and streams.
5	Municipal Contractor Oversight	Yes, developing contractual requirements will ensure that contractors are using appropriate control measures and standard operating procedures when working within the MS4.
5	Street Cleaning Program	Yes, this program reduces the amount of debris in the street that can lead to a nearby inlet.
5	Stream and Creek Maintenance	Yes, this program reduces the amount of trash in streams in the City.
5	Structural Control Maintenance	Yes, the program ensures structural controls are maintain and working properly.
5	Storm Drain Inlet Marking	Yes, marking storm drains will remind the public that storm drains discharge directly into creeks and streams, which may prevent any dumping or pollutants from entering the storm drain.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as visual observation, amount of materials removed or prevented from entering the MS4, or if required monitoring data, etc.) to evaluate reductions in the discharge of pollutants. Use a 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	General Education Program	Provide educational material frequency	1	Annually	No, but educating the public and City Council is important for their understanding of the SWMP.
1	Municipal Employee Training Program	Number of Employees Trained	1	Training Session	No, however it is important to educate City employees on ways to reduce and prevent pollution, as well as to identify and report if pollution is occurring.
1	Business Education Program	Groups of Business Types	1	Business Types	No, but educating local businesses about proper waste disposal is important to reduce pollution by making the populations more informed.
1	Texas Smartscape Program	Number of Bookmarks Ordered	500	Bookmarks	Yes, through the education residents receive planting native and adaptive plants helps reduce the amount of fertilizers and pesticides from local waterways.
1	Fertilizer and Pesticide Use Education	Number of links provided on City's Website	1	Link	No, but providing proper use of fertilizer and pesticide can reduce the harmful effects in local waterways.
1	Review the SWMP and MCM Implementation Procedures	BMPs Reviewed	26	BMPs	No, however, reviewing the program and BMPs annually ensures the program is compliant with TPDES permit.
1	Clean City Commission	Number of meetings	9	Meetings	Yes, involving the public in keeping the City clean is an effective way to reduce pollution.
1	Citywide Litter Cleanup	Number of Cleanup Events	2	Event	Yes, the cleanup event helps to eliminate trash and debris from entering local waterways.
2	Storm Sewer Map	Outfalls Mapped	100%	Outfalls	No, but the BMP allows staff to easily track illicit discharges and anticipate potential outfalls that may be affected from a discharge.

MCM	BMP	Information Used	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (yes or no, explain)
2	Public Reporting	Illicit Discharges Reported	0	Reports	Yes, the BMP provides a way of contact for residents to report illicit discharges and illegal dumping to minimize pollution.
2	Spill Control and Response	Illicit Discharges Reported	0	Reports	No, but it is important that the City follows proper procedures for addressing the source of an illicit discharge in the most efficient and uniform manner possible.
2	Ordinance for Illicit Discharge Detection and Elimination	Illicit Discharge Report	0	Reports	No, however, creating regulations that govern illegal dumping and illicit discharges can prevent pollutants from entering the storm drains.
2	Sanitary Sewer Inspections and Maintenance	Number of Manholes Treated	44	Manholes	Yes, cleaning the sewer system regularly reduces sanitary sewer overflows into waterbodies.
2	Illicit Discharge Inspections	Number of inlets Inspections	121	Inlets Inspected	No, but it is important for the City to have proper inspection procedures to ensure illicit discharge are being addressed safely and quickly.
3	Ordinance for Construction Site Stormwater Runoff Control	Number of Construction Inspections	125	Inspections	Yes, placing requirements on construction sites reduces the amount of pollution in the storm drains from site runoff.
3	Site Plan Review Process	Plans Reviewed	4	Plans	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 and Enforcement	Number of Construction Inspections	125	Inspections	No, but it is important for the Town to have proper inspection procedures to ensure construction sites are complying with the Town's Erosion and Sediment Control Ordinance.
4	Ordinance for Post-Construction Stormwater Management	Number of Post-Construction Inspections	0	Post-Construction Inspections	Yes, some post-construction requirements, such as detention ponds can serve to reduce pollutant loading in streams.
4	Post-Construction Inspections	Number of Post-Construction Inspections	0	Post-Construction Inspections	Yes, inspecting post-construction BMPs helps to maintain and ensure the BMPs continue to work properly and prevent stormwater pollution.

MCM	BMP	Information Used	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (yes or no, explain)
5	Inventory of City Facilities	Number of City Facilities	26	Facilities	No, however it is important to identify Town-owned facilities and stormwater controls in order to establish pollution prevention measures and sources of pollution.
5	Waste Disposal Procedures	Frequency of Waste Disposed	X5	Weekly	No, however it is important to provide proper waste disposal to ensure waste is not entering local waterbodies.
5	Municipal Contractor Oversight	Review Contract	0	Contract	No, but implementing contractual requirements and oversight ensures that MS4-hired contractors are accountable to the MS4's pollution reduction goals.
5	Street Cleaning Program	Zones Maintained	4	Zones	Yes, by directly removing debris and trash from the streets that would otherwise remain in a nearby inlet.
5	Stream and Creek Maintenance	Maintenance Performed	73	Locations Maintained	Yes, by directly removing debris and solids that would otherwise remain in the stream.
5	Structural Control Maintenance	Structural Controls Inspected	176	Structural Controls	No, but the program ensures the structural control are maintained and working properly.
5	Storm Drain Inlet Marking	Re-marked Inlets	0	Inlets	No, but storm drain marking serves as a reminder to residents and visitors that pollutants dumped in inlets drain directly to creeks.

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 educational materials at City Hall and Public Participation Events at least once annually.	Met goal. Educational stormwater material is provided material at City Hall, Public Works, and the library.
1	Provide SWMP information on City Website and review and update as necessary – at least once annually.	Met goal. The City's website provides information about the SWMP.
1	Continue to provide annual training to City employees.	Met goal. All new employees attended training in July.
1	Document the number of employees trained and type of materials used.	Met goal. The City identified new City employees to receive training.
1	Develop letter with recommended best management practices for preventing stormwater pollution.	Met goal. The City developed a letter with recommended best management practices.
1	Send letter to one group of businesses annually. Document number of businesses contacted.	Met Goal. The City sent the letter to auto shops.
1	Continue to make Texas Smartscape materials available at City offices and Public Library.	Met goal. The City provides Texas SmartScape at City offices and Public Works.
1	Review and update Texas Smartscape information on website as necessary each year.	Met goal. The City continues to provide Texas Smartscape link on the City's website. .
1	Include fertilizer and pesticide use information on the City website and review annually for any necessary updates.	Met goal. A link for correct usage of pesticides and fertilizers on the City's website.
1	Post annual reports to the City website no later than 30 days after the due date.	Met goal. The annual reports have been posted on the City's website.
1	Annually review the SWMP and MCM implementation procedures. Update if necessary.	Met goal. The City reviewed the SWMP and MCM and no changes were deemed necessary.
1	Continue to meet monthly and solicit public input and involvement in cleanup activities.	Met goal. The City holds a Clean City Commission meeting every month. 9 meetings were held in Year 5.
1	Continue existing citywide program and include information on all events in on website as appropriate.	Met goal. The City provided its residents with a Spring and Fall Citywide clean up on April 15th and November 11th.

MCM	Measurable Goal	Success
1	Annually document the number and dates of citywide events, person attending, and estimate trash removed for each event.	Met goal. The City provided its residents with a Fall Citywide cleanup, but did not document trash removed.
2	Review the map annually to ensure that any new outfalls operated by the City and any other information useful to the program are included.	Met goal. The storm sewer map is 100% complete and City will review with new development.
2	Annually review existing reporting procedures posted on City website. Revise if necessary.	Met goal. The City reviewed the existing reporting procedures and deemed no changes necessary.
2	Annually document the number of illicit discharges and spill complaints received.	Met goal. No illicit discharges complaints were received.
2	Annually review written spill control procedures and make any necessary revisions.	Met goal. The spill control procedures were reviewed, and no changes were deemed necessary.
2	Continue existing (or begin new) operations under the ordinance.	Met goal. The ordinance was reviewed and no changes were deemed necessary.
2	Treat the City's sanitary sewer system at least once annually with a degreasing product to prevent sanitary sewer overflows.	Exceeded goal. The City treats the City's sanitary sewer system quarterly.
2	Require contractors to provide CCTV inspections of all new sanitary sewer lines.	Goal not applicable for Year 5. No new public sanitary sewer was installed in Year 5.
2	Annually document number of inspections performed, identified sources of illicit discharges, and corrective actions.	Met goal. The City continues to inspect potential illicit discharges.
2	Continue inspection program. If changes are made to the ordinance, ensure that training of the new requirements and inspection procedures is conducted.	Met goal. The City documents the number of inspections performed as well as dates and locations.
3	Continue existing (or begin new) operations under new or revised ordinance.	Met goal. The ordinance was reviewed, and no changes were deemed necessary.
3	Include education regarding ordinance in educational materials to the public and businesses.	Did not meet goal. Educational material regarding the ordinance was not distributed.
3	Document number of plans reviewed each year.	Met goal. A total of 4 plans were reviewed in Year 5.
3	Implement changes to site plan review process.	Met goal. No changes were deemed necessary to the site plan review process.

MCM	Measurable Goal	Success
3	Document number of inspections performed, issues addressed, and corrective actions taken.	Met goal. Forest Hill documented construction inspections and it is available at City offices.
3	If changes are made to the ordinance, ensure that training of the new requirements and inspection procedures is conducted.	Met goal. Forest Hill documented construction inspections and is available at City offices.
4	Continue operations under ordinance passed in 2018. Annually review ordinance and determine if revisions are necessary.	Met goal. The ordinance was reviewed, and no changes were deemed necessary.
4	Document the number of sites inspected.	Met goal. There was no active construction with post-construction BMPs present.
5	Annually review inventory of City-owned facilities and revise, if necessary.	Met goal. The inventory of City-owned facilities was reviewed, and no changes were deemed necessary.
5	Continue existing waste disposal practices. Document waste disposal amounts removed from City facilities on an annual basis.	Met goal. The City continues to implement the existing waste disposal practices
5	Implement new municipal contractor oversight procedures.	Met goal. The contractor oversight procedures were reviewed, and no changes were deemed necessary.
5	Continue existing street cleaning program.	Met goal. Forest Hill continues to implement the street cleaning program.
5	Annually document activities included in program (miles cleaned, ton of debris removed, etc.)	Met goal. Street cleaning activities are documented for Year 5.
5	Continue existing stream and creek program. Annually document activities included in program (length of streams included, amount of debris removed, etc.)	Met goal. For Year 5, the City conducted routine drainage ditch maintenance. The City records dates locations, and maintenance performed in drainage ditches.
5	Continue existing structural control program. Annually document activities included in program (length of streams included, amount of debris removed, etc.)	Met goal. For Year 5, the City has inspected and maintained 44 manholes, 11 outfalls, and 121 inlets.
5	Re-mark inlets as necessary.	Did not meet goal. The City is searching for bilingual inlet markers.

C. Stormwater Data Summary (Part IV Section B.2. (b))

1. The MS4 has conducted analytical monitoring and visual observation of stormwater quality and submitted in the annual report.

☒ Yes ☐ No

a. Explain below or attach a summary to submit along with any monitoring data used to evaluate the success of the SWMP at reducing pollutants to the maximum extent practicable. Be sure to include a discussion of results.

- Sanitary Sewer Inspections and Maintenance
  - The City regularly monitors the existing conditions of sanitary sewer lines and performs maintenance as necessary. Actively monitoring and repairing the sanitary sewer lines reduces the potential for sanitary sewer overflows.
- Construction Site Inspections and Enforcement
  - This BMP requires city stormwater personnel to be actively monitoring construction sites for stormwater pollutants.
- Municipal Operation and Maintenance Activities
  - Observing the municipal operations and maintenance activities identifies possible pollutants that can be discharged into storm drains. In future years, the City has identified a BMP that will define monitoring and inspection frequencies which will result in active monitoring and observance of potential pollution.

D. Impaired Waterbodies (Part IV Section B.2. (c))

1. If applicable, explain below or attach a summary of 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:

- The City of Forest Hill discharges into North Branch of North Fork of South Creek, North Fork of South Creek and South Creek. The state classified waterbody that ultimately receives the discharge from Forest Hill is Lake Arlington (#0828). While this waterbody is not located within a TMDL watershed, Village Creek is listed as impaired on the TCEQ 2022 303d Impaired Waterbodies list for bacteria. The City of Forest Hill has implemented BMPs specifically targeting bacteria, Sanitary Sewer cleaning and monitoring and Park Cleanups. The City will monitor and determine the effectiveness of these BMPs throughout the permit term and make any changes as needed.

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (Part II Section D.4.(a)).

- Not applicable. The City of Forest Hill discharges into an impaired water body (Village Creek) without an approved TMDL by TCEQ and EPA.

3. Report the benchmark identified by the MS4 and assessment activities (Part II Section D.4.(a)(6).

- Not applicable. The City of Forest Hill discharges into an impaired water body (Village Creek) without an approved TMDL by TCEQ and EPA.

4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (Part II Section D.4.(a)(4)).

- Not applicable. The City of Forest Hill discharges into an impaired water body (Village Creek) without an approved TMDL by TCEQ and EPA.

5. If applicable, report on focused BMPs to address impairment (Part II Section D.4.(a)(5)).

- Not applicable. The City of Forest Hill discharges into an impaired water body (Village Creek) without an approved TMDL by TCEQ and EPA.

6. Describe progress in achieving the benchmark (Part II Section D.4.(a)(6)).

- Not applicable. The City of Forest Hill discharges into an impaired water body (Village Creek) without an approved TMDL by TCEQ and EPA.

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

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

The City 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 City will continue to post its Annual Reports on its website.
	Social Media Posts, Social Media Campaign	Post a minimum of 4 times per year; variety of impacts and practices; seasonally appropriate; quarterly	The City will develop a series of seasonally appropriate social media posts to post at least quarterly.
	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 City has currently marked 100% of its inlets and will maintain at least 15% annually.
	Fact sheets /brochures/utility bill inserts/door hangers	Develop topics that are group specific and address activities or pollutants of concern to reach 75% of the intended audience.	The City has and will develop additional materials for distribution to target audiences.

MCM	BMP	Measurable Goal	Description/Comments
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 City 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 City will have a booth with educational materials at one event per year.
	Public meeting for input on the program implementation such as a city council meeting, board meeting, or stakeholder meeting.	Host an annual meeting for program implementation feedback to reach 75% of the intended audience.	The City is planning to present the program to City Council that will include a Public Hearing.

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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City will continue to provide training for relevant staff and city 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 City 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 City 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 City 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 City 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 City will review its current implementation and ensure that it is meeting the permit requirements for pollution prevention measures on City 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 City 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

G. Additional BMPs (Part IV Section B.2.(f))

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 necessary for the City of Forest Hill at this time.

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

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

☐ Yes ☒ No

2.a. Is the named permittee 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 projects in the jurisdiction of the MS4 where the permittee was not the construction site operator (as provided in submittals to the MS4 operator via notices of intent or site notices)._____0_____

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: Venus M. Wehle

Title: City Manager

Signature: _____

Date: 3/18/2024

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	***Public Education, Outreach, and Involvement***
BMP Title:	***General Education Program***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Provide educational materials at City Hall and at any citywide public cleanup events. Provide SWMP information on City website and review and update annually.

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 City of Forest Hill provides educational flyers about various Pollution Prevention Practices at City Hall, Public Works, the substation and the library. The City's webpage provides information about the Stormwater Management Program and a link to educational stormwater information. Forest Hill's goal for the program is to educate residents about the stormwater management program and how to prevent stormwater pollution.

   (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.

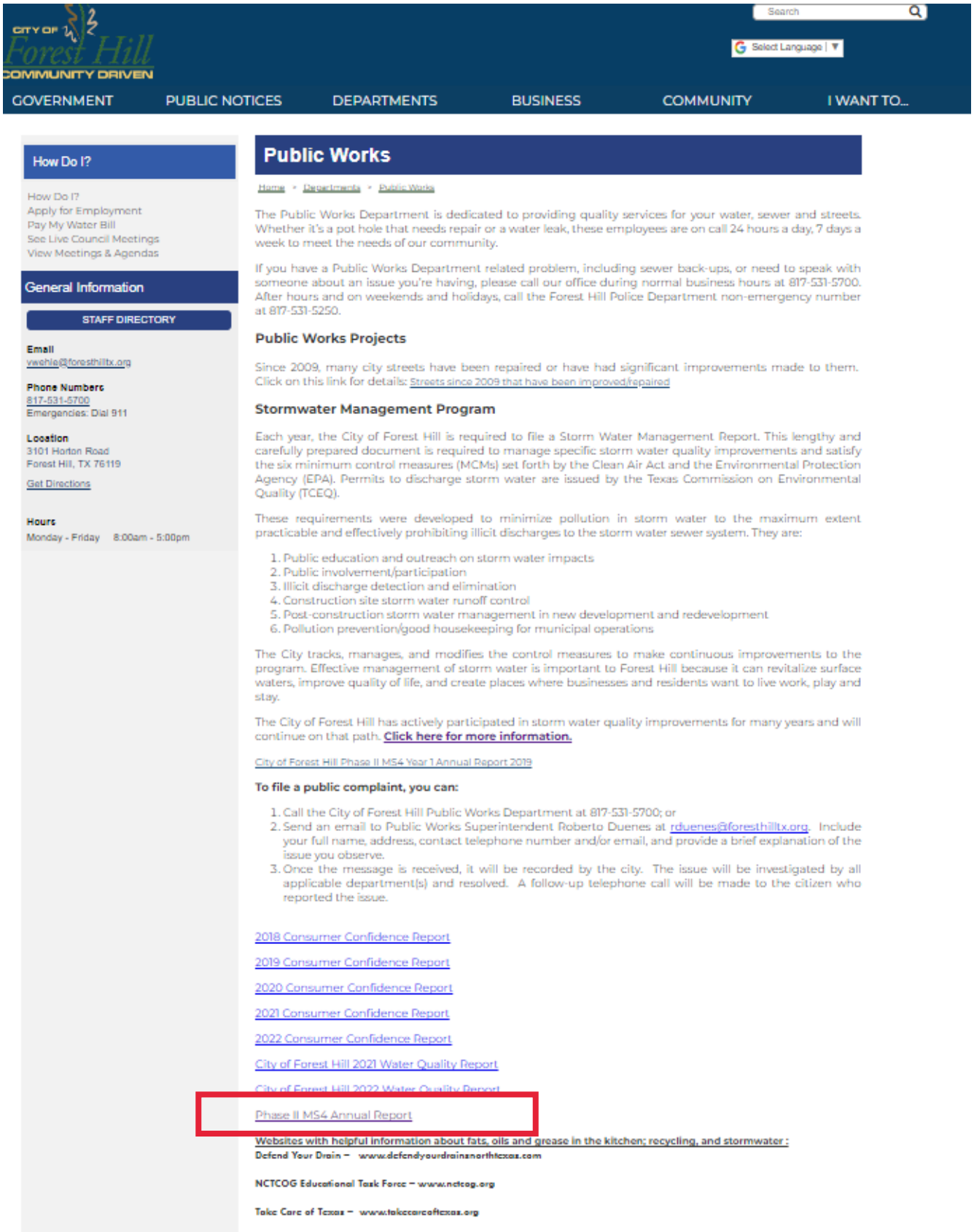
   Educating the public about stormwater pollution is paramount to a successful program and raises awareness of stormwater pollution.

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 ☒

City Website



CITY OF Forest Hill
COMMUNITY DRIVEN

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View Meetings & Agendas

General Information

STAFF DIRECTORY

Email
vwehle@foresthilltx.org

Phone Numbers
817-531-5700
Emergencies: Dial 911

Location
3101 Horton Road
Forest Hill, TX 76119

Get Directions

Hours
Monday - Friday 8:00am - 5:00pm

Public Works

Home » Departments » Public Works

The Public Works Department is dedicated to providing quality services for your water, sewer and streets. Whether it's a pot hole that needs repair or a water leak, these employees are on call 24 hours a day, 7 days a week to meet the needs of our community.

If you have a Public Works Department related problem, including sewer back-ups, or need to speak with someone about an issue you're having, please call our office during normal business hours at 817-531-5700. After hours and on weekends and holidays, call the Forest Hill Police Department non-emergency number at 817-531-5250.

Public Works Projects

Since 2009, many city streets have been repaired or have had significant improvements made to them. Click on this link for details: Streets since 2009 that have been improved/repaired

Stormwater Management Program

Each year, the City of Forest Hill is required to file a Storm Water Management Report. This lengthy and carefully prepared document is required to manage specific storm water quality improvements and satisfy the six minimum control measures (MCMs) set forth by the Clean Air Act and the Environmental Protection Agency (EPA). Permits to discharge storm water are issued by the Texas Commission on Environmental Quality (TCEQ).

These requirements were developed to minimize pollution in storm water to the maximum extent practicable and effectively prohibiting illicit discharges to the storm water sewer system. They are:

1. Public education and outreach on storm water impacts
2. Public involvement/participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post-construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations

The City tracks, manages, and modifies the control measures to make continuous improvements to the program. Effective management of storm water is important to Forest Hill because it can revitalize surface waters, improve quality of life, and create places where businesses and residents want to live work, play and stay.

The City of Forest Hill has actively participated in storm water quality improvements for many years and will continue on that path. **Click here for more information.**

City of Forest Hill Phase II MS4 Year 1 Annual Report 2019

To file a public complaint, you can:

1. Call the City of Forest Hill Public Works Department at 817-531-5700; or
2. Send an email to Public Works Superintendent Roberto Duenes at rduenes@foresthilltx.org. Include your full name, address, contact telephone number and/or email, and provide a brief explanation of the issue you observe.
3. Once the message is received, it will be recorded by the city. The issue will be investigated by all applicable department(s) and resolved. A follow-up telephone call will be made to the citizen who reported the issue.

2018 Consumer Confidence Report

2019 Consumer Confidence Report

2020 Consumer Confidence Report

2021 Consumer Confidence Report

2022 Consumer Confidence Report

City of Forest Hill 2021 Water Quality Report

City of Forest Hill 2022 Water Quality Report

Phase II MS4 Annual Report

Websites with helpful information about fats, oils and grease in the kitchen; recycling, and stormwater :

Defend Your Drain – www.defendyourdrainsnorthtexas.com

NCTCOG Educational Task Force – www.nctcog.org

Take Care of Texas – www.takecareoftexas.org

STORM WATER MANAGEMENT PROGRAM

City of Forest Hill staff administers the Forest Hill Storm water Management Program, activities and compliance with TCEQ and EPA regulations derived from the Clean Water Act which helps to protect our nations waterways by trying to prevent pollutants from entering them.

As part of our ongoing plans, the City encourages residents to:

- ► Help stop illegal dumping in storm drains, sewer systems, creeks and riverbeds as well as report it.
- ► Be aware of the type of pollutants and how to keep them out of our water resources.
- ► Participate in city-wide clean-up days of parks, medians, streets and other public properties.

ILLEGAL DUMPING:

Dumping trash and hazardous waste in unauthorized locations is unsightly and can cause major public health and safety concerns for our residents. These dumpsites can contain broken glass, metals, motor oils, paints, and other dangerous materials. This waste attracts rats, snakes, and mosquitoes. To report illegal dumping, call the North Central Texas Illegal Dumping hotline at 1-888-335-DUMP (3867) or the Police Department at (817) 531-5250.

POLLUTANTS:

Stormwater pollution can be divided into three categories:

- ► Natural — organic material such as leaves, grass clippings and sediment
- ► Chemical — such as detergents, coolant, oil, grease, fertilizer and paint
- ► Litter — such as plastic bags and cigarettes

A variety of treatment technologies are available to manage stormwater, and the effectiveness of each on specific pollutant removal is quite diverse. Some treatment technologies are very effective at removing pollutants or nutrients than others. The best pollution prevention…is not to pollute! We encourage you to report it.

CITY CLEAN-UP EFFORTS

The City's Public Works Department coordinates community clean-up days, the Adopt-A-Median Program and park projects. For information about these events or to volunteer, call (817) 531-5700.

STORM WATER MANAGEMENT PROGRAM

Helpful links/information:

Environmental Protection Agency (EPA):
http://www.epa.gov

Texas Commission on Environmental Quality (TCEQ):
http://www.tceq.state.tx.us/nav/permits/wq_construction.html

North Central Texas Council of Governments (NCTCOG):
http://www.nctcog.org/envir/SEEclean/stormwater/index.asp

How-to guide for landscaping:
http://www.txsmartscape.com

Correct Usage of Pesticides and Fertilizers:
http://takecareoftexas.org

Water Quality Report:
The City is required by the EPA and TCEQ to produce an annual report outlining the quality of your drinking water. See the Public Works Department page on the City's website for the most current reports.

Landfill:
Currently you are allowed one (1) free dump per year at the landfill. You must bring proof of residency.

Fort Worth C&D Landfill
4144 Dick Price Road, Fort Worth, TX 76140
(817) 516-7777

Household Hazardous Waste Drop-Off Center:
Forest Hill residents have the opportunity to properly dispose of hazardous waste. The Environmental Collection Center is located in Fort Worth and there is a fee to dispose of waste. To learn more about what they accept, hours of operation or if you have general questions, call 817-392-EASY (3279). It is located at 6400 Bridge Street, Fort Worth. Visit them on the web at http://www.fortworthgov.org/dem/info/default.aspx?id=4980.

Take Care of Texas™
It's the Only One We've Got!
TakeCareOfTexas.org
A PROGRAM OF TCEQ

GUIDE TO YARD CARE

Do your part for the environment, starting in your own yard

This guide will help you maintain a healthy yard, save money, and take care of our state's varied landscapes.

GI-465 (Rev. 7/22)
TakeCareOfTexas.org/resources

TABLE OF CONTENTS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

How is our customer service? tceq.texas.gov/customersurvey

Why Take Care of Texas?

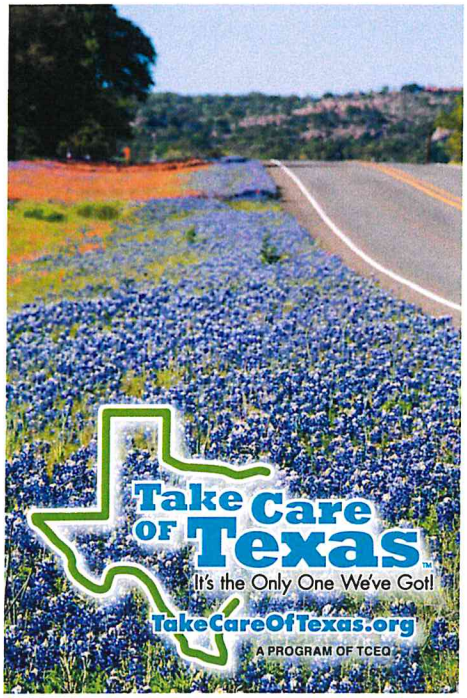
Texas is a scenic state rich in diverse resources. As Texans, it is our job to make sure our state remains a beautiful and healthy place to live. To accomplish this goal, we all need to do our part. The Take Care of Texas campaign is designed to involve all Texans in simple changes that will help keep our air and water clean, conserve water and energy, reduce waste, and save a little money in the process. For more information, please visit TakeCareOfTexas.org.

Water Conservation

Lawn and garden watering makes up 30–50% of total household water use. Finding ways to use less water will not only help conserve this precious resource, it will also save you money on your water bill.*

Some simple steps you can take are:

- water efficiently,
- don't overwater,
- collect rainwater,
- maintain your irrigation system, and
- use mulch.



Keep Our Water Clean

The quality of water is improving statewide, thanks to efforts by cities, industries, and individuals. However, we all need to do our part to help keep our lakes, rivers, and streams clean for their intended uses—whether it's for swimming, fishing, or drinking.

You can make a difference by:

- using fewer fertilizers,
- choosing natural options,
- controlling pests with less pesticides,
- preventing erosion, and
- reducing runoff.

Keep Our Air Clean

Despite a quickly growing population, Texas' air quality has made huge strides in the past few decades.

We all need to continue to do our part to keep our air clean, and a great place to start is in your own yard.

Maintain Your Equipment

Follow the manufacturer's maintenance guidelines, including the following practices:

- Change the oil and clean or replace air filters regularly. Make sure you recycle your used oil at a collection center. To locate a center near you, go to www.tceq.texas.gov/p2/hhw/hhw.html.
- Use the proper mixture of fuel and oil in equipment with two-stroke engines.
- Get periodic tune-ups, maintain the mower's blades, and keep the underside of the mower's deck clean.
- Protect your equipment from the elements when not in use.

Avoid Spilling Gasoline

To prevent spills and overfills, try the following tips:

- Use a gasoline container you can handle easily and hold securely. When you pour, do it slowly and smoothly.
- Use a funnel or spout with an automatic stop device to prevent overfilling. Keep the cap or spout and the vent hole on gasoline containers closed tightly.
- Transport and store gasoline and power equipment out of direct sunlight in a cool, dry space.

Consider Cleaner Options

Some types of lawn and landscape equipment are more environmentally friendly than others. When selecting equipment, compare the air emissions, noise level, and energy consumption of different products.

Tools without motors are especially handy for small yards or small jobs; not only are they quiet, but they also generate no emissions.

Water-Efficient Landscape Design and Irrigation

To create a beautiful, healthy, and low-maintenance yard that benefits the environment, it's important to have:

- a thoughtfully designed landscape,
- native or well-adapted plants, and
- an efficient irrigation plan.

Landscape Design

Creating a healthy, low-maintenance landscape starts with a well-planned design that benefits both you and the environment. Sketch your yard with locations of existing structures, trees, shrubs, and grass areas. Then think through your landscaping requirements, limitations, and considerations regarding budget, appearance, function, maintenance, and irrigation.

Take note of slopes and consider including buffer zones of turf grass or other thick vegetation to absorb runoff from buildings and patios, and to reduce runoff into driveways and streams. Include lawn edging and hard surfaces between turf and other landscape features to discourage weeds and reduce the need for trimming and herbicides.

Group together plants that have similar watering needs to prevent overwatering and excessive plant growth.

For more information on landscape design, visit earthkind.tamu.edu.

Plant Selection and Care

Using native and well-adapted plants is one of the easiest ways to create a beautiful, low-maintenance, and environmentally sound yard. Plants that are native or well adapted to your area will:

- use less water,
- reduce the need for soil modification,
- require little or no fertilizer,
- be less susceptible to pest problems, and
- be more tolerant of stressful environmental conditions, such as drought.

Incorporate a variety of plants to provide food and cover for a variety of living things. Diversity also minimizes damage from pests, because many of them attack only one plant species. Dense plantings can provide shade that keeps out invading weeds.

Keep in mind that newly established landscaping will require more water than an established area. Adjust your watering schedule according to the needs of your plants.*

Avoid frequent or deep cultivation, which can damage plant roots, dry out the soil, disturb healthy soil organisms, and bring weed seeds to the surface where they can germinate. Cover all bare soil between plants with a solid mulch layer.

Consider planting deciduous trees on the south and west sides of your house and around your air conditioner. Because deciduous trees lose their leaves in the winter, they can save you energy by keeping your home shady and cool in the summer, yet allowing the sun to shine through windows to warm your home in the winter.

Choose Your Turf

In most landscape areas, turf grasses have the highest water demand and the highest maintenance requirements of all plants.

However, when properly maintained, turfgrass can have a positive impact on the environment. Turfgrass that is actively growing can be beneficial to your yard and the environment by helping to:

- stabilize soil,
- conserve water,
- filter air- and water-borne pollutants,
- suppress and control dust, glare, and noise, and
- dissipate heat.

Select grass carefully according to its intended use, planting location, and maintenance requirements, and make sure to choose turf that is compatible

with your region and environment.

When choosing what type of grass to use, keep in mind its tolerance to shade, drought, traffic, cold, salinity, and disease. Properly adapted turfgrass will require less maintenance and smaller amounts of fertilizer and supplemental water.

St. Augustine and Bermuda grasses are most often used for lawns in Texas. Zoysia, buffalo, and centipede grasses are used less often but are also good options.

Planting the lowest-water-use turf grass adapted to your region is an effective way to reduce the need for landscape irrigation. Mowing grass at the height appropriate for its type helps conserve water and strengthen grass roots.

Avoid narrow strips or odd shapes of turf grass that will be difficult to irrigate without wasting time and water. Other forms of ground cover or alternative plant areas can also reduce your ongoing expenditures of time, energy, water, and money.

For more information on selecting grasses, visit Aggie Turf at aggieturf.tamu.edu.

Mulch

What Is Mulch?

Mulch is one of the best landscape substances for growing healthy plants and conserving water. The best mulch for your yard is one created from native sources and could include straw, newspaper, sawdust, bark, pine needles, leaves, grass clippings, and compost. It can benefit your lawn and garden by aiding in root development, preventing erosion, suppressing weeds, moderating soil temperature, and adding nutrients as they break down slowly. Mulching also helps conserve water by reducing water lost through evaporation.

How to Use Mulch

- Put a 4-inch layer of mulch around your trees and shrubs and a 2-inch layer around your garden plants. These should be the depths of the layers after settling. To prevent diseases and pest infestation, mulch should not be piled up against the stems or trunks of plants. For best results, use long-lasting mulches (wood chips, wood shavings, evergreen needles).
- Create a self-mulching lawn! Wait to mow until your grass is between 2 and 4 inches high. Then mow off only the top one-third of the grass, and don't bag the clippings. This way, the clippings will feed your soil and won't smother your grass.
- If you have too many clippings, rake them into mulch layers around trees and shrubbery.

Mulching Basics

- To control erosion in a lawn, cover bare areas with 2 to 4 inches of mulch.
- Mulch all areas that are not covered in grass or thick ground cover.
- When converting grassy areas to mulch, smother the grass with a thick layer of cardboard or newspaper rather than using chemicals. Some hardy grasses must be rooted out for successful removal.
- Blanket dormant perennials with several inches of shredded leaves or whole pine needles to protect them from the freezing weather.
- Spread mulches under annuals after they are well established.
- Water the ground thoroughly before and after applying a mulch cover.
- Do not put organic mulch where water flows rapidly or it may wash out.
- Rocks and other heavy, inert materials can be used in berms or buffers to slow the flow of water entering mulched areas, protecting them from wash-out.

Fertilizer Use

More is not always better when applying synthetic fertilizers. There are less toxic, even natural, substitutes that are just as effective.

If you do choose to use fertilizers, however, it is very important to your health and the environment to always follow the manufacturer's directions, use only the recommended amount, and adjust your watering accordingly.

Be careful not to overfertilize, which can weaken turf and contribute to water pollution. Excess fertilizer can get washed away by overwatering or a rainstorm—wasting your money and contaminating nearby waterways with pollution.

Choose natural or organic fertilizers, such as compost, which typically slow-release their nutrients and can often be used in smaller amounts.

The best times to apply fertilizer, if it's needed, are at the beginning and end of the growing season, which will vary according to the temperature range in your region.

To prevent runoff pollution, do not overwater after applying fertilizer and avoid fertilizing just before a rainstorm.

Water Efficiently

One of the most important steps in maintaining a healthy landscape is effective irrigation. A properly watered lawn and garden is more resistant to pests and other lawn problems. However, much of the water used to maintain our landscapes is wasted through inefficient watering techniques. By developing a

water-efficient lawn and garden, you can maintain a healthy and beautiful yard that benefits the environment.

Watering Mistakes

Much of the water applied to lawns and gardens never gets absorbed by the plants. Common ways that water is wasted include:

- **Runoff.** Applying water too rapidly causes runoff, because grass and plants can only absorb so much water at a time. When runoff occurs, soil, fertilizers, and pesticides can be carried to nearby streams and lakes.
- **Evaporation.** Watering in the middle of the day causes much of the water you apply to be lost through evaporation. Plants don't have enough time to absorb the water before it is evaporated by the sun. Some water evaporates when it's applied to bare, unmulched soil. Also, a sprinkler head that has been set correctly sprays large drops of water instead of a fine mist, which is more susceptible to evaporation and wind drift.
- **Underwatering.** Watering too little is wasteful because it does little to alleviate any drought stress that the plants may have.
- **Overwatering.** Applying too much or too often causes the greatest waste of water. In addition to overwatering the plant, excessive irrigation can leach nutrients deep into the soil away from plant roots, which increases the chance of runoff or groundwater pollution.
- **Adjustment.** Watering sidewalks or driveways wastes water and can be avoided by properly adjusting sprinkler heads.

Good Watering Techniques

Most lawns receive twice as much water as they require for a healthy appearance. The key to watering lawns is to apply water infrequently, yet thoroughly. This creates a deep, well-rooted lawn that efficiently uses the water that is stored in the soil. To know when to water your lawn, simply observe the grass. Wilting and discoloration are signs of water stress. At the first sign of wilting, you have 24 to 48 hours before damage occurs.

Irrigate efficiently, wetting the soil to a depth of 4–6 inches, and allow the soil to dry out between watering.

A general rule is that most lawns need up to one inch of water a week. To water properly, apply 1 inch of water to the lawn as rapidly as possible without runoff.

An easy way to measure your application of water is to place a few empty, 6-ounce tuna cans around your lawn. When the cans each hold 1 inch of water, you have applied enough.

If you start to notice runoff before the cans contain 1 inch, turn off the water. Then, wait for approximately one hour to allow the grass to absorb the water before turning it on again.

Water early in the morning, before 10 a.m. Avoid watering from mid-morning to late afternoon, when you can lose one-third of your water to evaporation. Also avoid watering in the evening, because lawns and plants that are left wet overnight are more prone to disease.*

Irrigation Systems

Sprinkler systems offer an effective method for watering, if used properly. The goal of any irrigation system is to supplement rainfall. You can achieve your landscaping goals while conserving

water by using spray irrigation or drip irrigation. You may use permanent installations or temporary (hose-end) irrigation systems.

If you design and install your own permanent landscape irrigation system, it must meet required state and local design standards and requirements. To review the irrigation rules for Texas, please visit www.tceq.texas.gov/drinkingwater/irrigation. For your local rules, please contact your water utility.

If you do not install your own system, you should work with a licensed irrigator. A licensed irrigator can help evaluate your landscaping needs and develop plans that ensure the irrigation system works properly and conserves water. To locate a licensed irrigator in Texas, visit www2.tceq.texas.gov/lic_dpa/index.cfm.

All permanent irrigation systems are required to be connected using approved backflow prevention to ensure there is no cross-connection with the water supply.

Cross-Connection Control and Backflow Prevention

To maintain the quality of our drinking water, irrigation systems must be designed, installed, and operated to control possible cross-connections and prevent backflow into the water supply. Without proper backflow prevention, the stagnant water from the sprinkler system could be drawn into the drinkable water supply for your home. For more information on backflow, see *A Consumer's Guide to Backflow Prevention in Texas* (GI-411) at www.tceq.texas.gov/goto/gi-411.

What is a Cross-Connection?

A cross-connection is a physical connection between drinkable water and a liquid or gas that could make the water unsafe to drink.

What is backflow?

Backflow is water flowing against its intended direction, which can contaminate the water supply. Backflow can be caused by either a loss of pressure in the supply lines or an increase in pressure on the customer's side.

There are several ways that you can prevent backflow in your irrigation system:

- Make sure that the end of your garden hose is never submerged in water not suitable for drinking.
- Install a hose bib vacuum reaker on each of your outside faucets. These inexpensive devices are available in most hardware stores and are designed to allow water to flow in only one direction.
- Schedule a licensed backflow prevention assembly tester to perform a test to confirm that your backflow prevention assembly is operating properly. Keep in mind that you must have the licensed tester examine all backflow prevention assemblies upon installation. Check with your water provider about more stringent regulations that may apply and the required frequency for testing of your backflow prevention assembly.

For More Information

If you are thinking about installing your own irrigation system or would like to know more about the requirements for irrigation systems and licensed landscape irrigators, the rules explaining those requirements can be found in Title 30, Texas Administrative Code, Chapter 344.

The TCEQ Landscape Irrigation program can provide valuable information on landscape irrigation in Texas. You may contact the program by email at Install@tceq.texas.gov or visit their webpage at www.tceq.texas.gov/drinkingwater/irrigation.

To locate a licensed irrigator or licensed backflow prevention assembly tester, please visit www2.tceq.texas.gov/lic_dpa/index.cfm. It is important to always check the licensing credentials of anyone you may potentially do business with.

The *Environmental Protection Agency's Cross-Connection Control Manual* offers information on cross-connection controls and methods of backflow prevention. Go to www.epa.gov/nscep and search for "cross connection." Always contact your local water supplier before planning or installing an irrigation system to ensure that you comply with any requirements.

Spray Irrigation

Spray systems can be part of a permanent irrigation system or a temporary system that consists of "hose-end" sprinklers that you can set up and move around.

Your area may have specific requirements for permanent irrigation systems, including obtaining a permit for the system and installing the appropriate backflow prevention assembly. You should contact your local water supplier before planning or installing an irrigation system to ensure that you comply with any requirements.

When used properly, permanent sprinkler systems can save time and money. Many underground irrigation systems use timed controllers that turn off the system when a measured amount of water is used. Rain and moisture sensors help prevent watering in the rain and are now required in most areas in Texas. Check with your local water supplier to make sure your irrigation system meets the requirements that are in place for your area.

Permanent sprinkler systems require maintenance and adjustments. This can be done by you, a licensed irrigator, or licensed master plumber.

- Check your settings at least quarterly to make sure that water is being applied properly and make adjustments as needed. It is important to ensure you are

providing adequate water but are not overwatering. Depending on where you live, you may need to winterize your system in the late fall to prevent freezing of system components.

- Check your sprinkler heads regularly. Remove any dirt or debris that may be clogging the nozzle and make sure that water is flowing at the proper pressure.
- Check for leaks and repair them promptly. Sprinkler head repair can be done by you, a licensed irrigator, or a licensed master plumber.

Different areas of your yard may have different watering requirements. Some plants and trees may require less water than grass does. You can reduce the sprinkler run time for these areas. A licensed irrigator can advise you on irrigation application rates for your geographic area, topography, soil conditions, and other factors.

For "hose-end" sprinklers, make sure the sprinkler heads are adjusted to avoid watering sidewalks and driveways or other hard surfaces. A hose-end sprinkler head should spray large droplets of water instead of a fog of fine mist, which may be affected by wind drift. Set a timer so that you remember to turn off the hose-end sprinkler.

For more information on irrigation systems, see *Landscape Irrigation: A Consumer's Guide to Landscape Irrigation in Texas* (GI-390) at www.tceq.texas.gov/goto/gi-390.

Drip Irrigation

Drip irrigation can offer a more efficient method of watering than spray irrigation, particularly in small areas. Drip irrigation applies water to the soil slowly and under low pressure through emitters, bubblers, or spray heads placed at intervals. Because drip irrigation systems distribute water slowly, the run time may be significantly longer than for a traditional sprinkler system. However, there will be less evaporation and loss due to runoff.

Drip irrigation installation can be inexpensive and, with maintenance, can last as long as other irrigation systems. You can install drip irrigation systems on or below the ground's surface. Consult a licensed irrigator to determine the appropriate type of drip irrigation system for your needs.

Drip irrigation can be used for watering vegetables, ornamental and fruit trees, shrubs, vines, and container-grown plants outdoors. Drip irrigation is not well suited for solid plantings of shallow-rooted plants such as grass and some ground covers.

Some of the benefits of drip irrigation are:

- Drip irrigation can reduce water loss by 60% or more, compared to spray irrigation. Because drip irrigation applies water just where it is needed, there is little chance of waste through evaporation or runoff.
- The soil moisture remains relatively constant.
- Water contact with the leaves, stems, and fruit of plants is minimized, preventing disease.
- Rows between plants remain dry, which reduces weed growth.
- Once installed, little labor is required to operate or maintain a drip irrigation system.

Operating a drip system involves deciding how often to turn it on and how long to leave it on. The object is to maintain adequate soil conditions without wasting water by overwatering.

- For newly seeded gardens, the system should run only a short time every day for a few days, to keep the surface soil from drying out.
- Plants loaded with fruit will need an inch of water every other day.*

Soaker Hoses

Soaker hoses require less equipment and can be easier and less expensive to install than drip irrigation. A soaker hose is a porous hose that you can connect to an outside faucet, garden hose, or rain barrel and lay out along the base of plants. The hose allows water to seep out along its length. This system works well with plants that are close together, like ornamental beds with clumped flowers or ground covers.

However, you should not use a soaker hose to irrigate plants, trees, or shrubs that are spaced far apart, because the area between the plants will be excessively watered, which wastes water and could lead to weaker plants.

Composting

What Is Compost?

Composting is the controlled, accelerated decomposition of organic material such as yard trimmings, kitchen scraps, wood shavings, cardboard, and paper. Compost is a material rich in humus and nutrients, and can also make good mulch.

How to Use Compost

- You can use it as a mulch or topdressing or mix it into the soil. Compost makes good mulch because it is generally free of weeds and is inexpensive. It helps the soil absorb and retain nutrients and moisture and protects plants from diseases and pests.
- To plant a lawn or garden, mix 1 to 2 inches of compost into the top 6 to 8 inches of soil.
- To add nutrients to established ornamental plants, apply a 1/2- to 1-inch layer of compost on the soil or directly beneath mulches.
- You can add compost to established lawn areas. Verticutting or aerating will improve the infiltration of compost to the root area. Use a rake to distribute compost into the crevices. Mulching your lawn in the spring (and fall, if needed) with compost is also a great soil-building strategy.
- To add nutrients and control fungus in gardens or planters, use compost as one-third of a potting soil mix (with equal parts topsoil and sand).
- Avoid backfilling planting holes with compost as it will discourage plant roots from growing outward.

Composting Basics

- Composting works best when you combine equal amounts (by weight) of "green" and "brown" materials in the mixture.
- The compost pile should remain moist throughout, like a wrung-out sponge, but not soaked. "Brown" composting materials include dead leaves, dry hay, wood shavings, and shredded paper. Vegetable and fruit scraps, green grass clippings and shrub prunings, and manure are examples of "green" composing materials.
- Compost breaks down faster in a pile at least 3 feet high and 3 feet in diameter, with all the materials broken into small pieces and well mixed.
- Composting occurs most rapidly when green and brown materials are reduced to small pieces and thoroughly mixed together. That way, every part of the pile gives decomposing organisms access to needed carbon, nitrogen, oxygen, and water. A pile of large chunks of material will have too much air space, and the surfaces will dry out rapidly. On the other hand, a pile of very fine materials may have too little oxygen and require frequent turning.
- Twigs and leaves can be run over with a lawn mower or run through a leaf shredder.
- Garden plants or fleshy prunings can be chopped with a machete or pruning shears.
- Food scraps can be cut up in the kitchen or chopped up in a bucket with a square-point shovel.
- You can tell a pile is quickly and actively composting when it gets at least as hot as the hot water in your house. Temperatures this high (135 degrees Fahrenheit or higher) can kill most weed seeds and germs that cause disease. Help your pile stay hot by putting it in a bin or covering it with a tarp. You can use a special compost thermometer to monitor its temperature.
- Watch our video of "How to Start Composting in Your Own Backyard," featuring Travis County Master Gardener Patricia Mokry, who explains simple ways to begin and maintain various types of compost https://www.youtube.com/c/TakeCareofTexas/videos.

Good Choices for Composting

- ✔ Yard waste such as leaves, grass clippings, pine needles, weeds, small prunings, and spent garden plants.
- ✔ Food waste such as vegetable and fruit scraps, coffee grounds and filters, and used tea bags.

Avoid These Materials

- ✘ Meat, bones, fish, dairy products, grease, and oil—they cause odors and attract pets and pests.
- ✘ Pet droppings—they can harbor diseases.
- ✘ Noxious weeds with seeds or runners—you could wind up spreading them with your compost.
- ✘ Diseased and insect-infected plants—the diseases and pests could survive in your compost and spread.
- ✘ Shavings and sawdust from treated wood, and other materials containing strong preservatives or other toxins.
- ✘ Ashes—they slow the composting process.

Why Compost?

Save Money

- Lower your water bill.
- Buy less fertilizer.
- Stop buying lawn and leaf bags.

Save Time and Effort

- Stop bagging grass and leaves.
- Spend less time watering.
- Spend less time fertilizing.

Help Your Community

- Save landfill space.
- Conserve water resources.
- Reduce water pollution.

When Is Compost Ready?

Using compost before it is ready can damage plants. Undecayed "brown" materials in the soil can temporarily reduce plant-available nitrogen. Undecayed "green" materials can harbor pests and diseases. Immature compost can also introduce weed seeds and root-damaging organic acids. Compost is ready when:

- it smells earthy—not sour, putrid, or like ammonia;
- it no longer heats up after it is turned or dampened;
- it has a crumbly texture and it looks like dark soil; and
- it has a pH near neutral.

Turning the Pile

Turning optimizes conditions for composting bacteria and helps to:

- add more oxygen,
- distribute moisture evenly,
- break up clumps and compacted material,
- blend green and brown materials better, and
- increase the temperature enough to kill weed seeds.

In the summer, you should turn the pile weekly. In the winter, once a month will suffice. You can use a hayfork or a compost turner to break up clumps and move drier material from the outer edges to the center.

Harvesting Compost

Compost can be shoveled out of a pile or bin and used just as it is, especially for mulch. Remove undecayed objects by sifting them through a screen.

- If you are using compost to prepare soil for planting or sodding, sift it through a 1-inch mesh screen. Compost used in potting mixes or as topdressing on lawns is commonly sifted through a 3/8- or 1/2-inch mesh screen.
- Make a simple screen by mounting hardware cloth or other durable wire mesh in a sturdy wooden frame that will fit neatly onto the wheelbarrow or other container into which you will sift the compost.
- Spread compost onto the screen in a thin layer and shake it. You can work the material through the screen with a paddle if it is fine but clumpy.
- Add the "oversized" material that remains on top of the screen to a new pile to help the new pile start composting faster.

Compost Variations

Compost Containers

You can store compost in a pile or in a bin; however, bins can help keep your yard tidy, discourage pests, and make the compost easier to turn. You can make your own container with lumber, pallets, concrete blocks, wire fencing, or other materials.

When selecting a compost container, keep the following tips in mind:

- **Capacity.** The best composting temperature is reached in a pile or bin of at least 1 cubic yard (3-foot length, width, and height).
- **Access.** Select a bin design that allows easy access for adding material, for watering, and for turning.
- **Ease of assembly and relocation.** These features allow you to easily move your bin for turning and refilling.
- **Security.** A well-managed compost pile should not attract harmful bugs, and pet and vermin access should be restricted.
- **Moisture and heat retention.** Enclosed bins work better for smaller amounts of material.

Troubleshooting

Symptom	Problem	Solution
Bad odor.	Too wet or too much green material.	Turn the pile or add more brown material. Cover the pile with a layer of mulch if the odor continues to persist for more than one day.
Material is not breaking down and the pile is dry.	Not enough water.	Turn the pile and add water until the whole pile is moist.
Pile is damp and sweet-smelling, but will not heat up.	Not enough nitrogen.	Add higher-nitrogen materials like green grass clippings, food scraps, coffee grounds, blood meal, or manure.
The pile is not warm enough or is only warm in the center.	The pile is too small.	Add more materials to increase volume or consider using a container for the compost.
The pile has flies, roaches, ants, or maggots.	Too wet or food is exposed.	Ensure that the pile stays damp, but not soaking wet. Bury food items under a layer of leaves.

- **Flexible size and adjustable shape.** These features will accommodate changes in compost volume.
- **Aesthetics.** This is a personal consideration for both you and your neighbors.

Composting in the Ground

Burying Problem Materials

Mix smelly food scraps and insect-infested garden plants with soil and bury the mixture at least 8 inches deep in unused garden space. If the material stays moist, it will compost in a year without producing an odor or spreading diseases or pests.

Sheet Composting

When tilling in the fall, add a few inches of leaves in unplanted garden space to enrich the soil for spring planting. Avoid using this method, called sheet composting, just before planting. Much of the soil's plant-available nitrogen will become temporarily unavailable as composting microbes consume it along with the brown leaves. A few months after sheet composting, there will be more plant-available nitrogen in the soil than before.

Walkway Composting

Spread a thick layer of leaves, chipped branches, and grass clippings into shallow ditches or rows between garden beds to form walkways. Add more material later as it compacts. In a few months, most of this material will decompose enough to be incorporated into the garden soil when the soil is reworked for planting.

An Easy Compost Recipe

1. Select an area that measures 4 by 8 feet, where water does not puddle when it rains.
2. Place the bin or pile on half of this space, mixing brown and green materials in equal parts by weight, or about three-to-one (brown to green) by volume. Chop or shred woody materials for the pile. Water the pile as you build it to keep it thoroughly moist like a wrung-out sponge.
3. Build the pile to a height of 3 feet to speed up the composting process.
4. Mix greens and browns as you add to the pile. When adding kitchen scraps, bury them 10 inches or so into the pile to avoid attracting pests.
5. Turn the pile, adding water as needed.
6. You can sift and use finished compost when the materials break down and it smells like rich soil.

Worm Composting

Worm composting uses worms to turn food scraps, newspapers, and cardboard into rich compost that you can add to potted plants, lawns, or gardens. It is convenient, and you can do it both indoors (even in an apartment) and outdoors. Worm composting is also the best way to compost paper.

The Worms

Brown-nose worms or red worms work best in containers; do not use night crawlers or other large, soil-burrowing worms. Composting worms are available from various stores and catalogs that sell garden soils and supplies.

The Material

- **Paper.** Paper serves as "bedding" for the worms to live in. The worms consume it along with the other materials. You can use any kind of paper, but worms will consume newspaper, cardboard, paper towels, and other coarse paper faster than fine printing and writing paper.
- **Food scraps.** Almost any fruit, grain, or vegetable material other than oil is good for worm composting. Egg shells, coffee grounds, and tea bags are also fine.
- **Other materials.** Add a little soil or fine sand to provide grit. Leaves and other yard trimmings can also be used as part of the bedding. Livestock manure is excellent food for worms in outdoor containers.

The Container

You can use wooden boxes, plastic bins, or holes in the ground. A 1-by-2-by-3-foot box or four 10-gallon containers are big enough to compost the food scraps from a medium-sized family. Punch a few 1/8-inch holes in the upper sides for ventilation. Tight-fitting lids help keep pests out of outdoor wooden boxes, but don't use a lid with a plastic container unless the container is well ventilated. A poorly ventilated, sealed plastic container can quickly suffocate the worms.

How to Compost with Worms

- Tear newspaper or cardboard into strips. Dip the strips into water and let them drain.
- Add this paper bedding to a bin until it is one-third full. Mix in a little soil or fine sand. Start with a pound of worms for each pound of food scraps that you plan to compost each week. Unless you start composting more food scraps, you should never need to add more worms.
- Add a 1/2-inch or thinner layer of food scraps on top, mix it lightly into the top 2 inches of bedding, and cover everything with at least 1 inch of shredded paper. Don't leave any food scraps at the surface. Wait two days or longer, and then repeat these steps as materials are available.
- When a worm bin is full, scoop out any undigested food scraps and the material that contains the most worms—usually the top 3 to 4 inches of the material. Use the rest as compost. Put the worm-rich material back in the bin, mix it with an equal amount of fresh bedding, and cover it with 1 inch of shredded paper.

Rainwater Harvesting with Rain Barrels

What Is Rainwater Harvesting?

Rainwater harvesting is the collection and storage of rainwater, offering an effective way to conserve water in your yard. You can collect rainwater from a roof, which is the most common method, and store it in catchment tanks, such as rain barrels. Systems for harvesting rainwater can be as simple as placing a barrel beneath a gutter downspout to collect a small amount of water for use on gardens and plants. Rain barrels are simple to install and can be made easily at home.

A Brief History of Rainwater Harvesting

Before there were public water utilities, many American households harvested rainwater. With the development of large, reliable water treatment and distribution systems, the appeal of rainwater harvesting diminished.

However, as the environmental and economic costs of providing centralized water escalate, a new interest in rainwater harvesting has emerged.

The easiest way to begin harvesting rainwater for your home is to use a rain barrel to collect water for your container plants, landscape, and garden.

Reasons for Harvesting Rainwater

Benefits

By collecting rainwater and using it on your lawn, plants, flowers, trees, and shrubs, you can save water and money. In fact, by collecting rainwater from just 10% of the residential roof area in Texas, we could conserve over 31 billion gallons of water annually.

Using collected rainwater has three major advantages:

- it reduces runoff pollution,
- it can reduce your utility bills (the water is free!), and
- it is healthier for plants than treated water.

Other Incentives

Texas Tax Code 151.355 exempts rainwater-harvesting equipment from sales tax. To download the Texas Sales and Use Tax Exemption Certificate, visit www.comptroller.texas.gov/forms/01-339.pdf.

Some cities and counties offer rebates or reduced costs for rain barrels. Check with your local government or water utility to find out if incentives are available in your area.

Maintaining Your Rain Barrel

Like most things around your home, your rain barrel needs a little regular attention to keep working smoothly. To keep it in the best shape:

- Use all the water in the barrel regularly.
- Clean your gutters at least twice a year to reduce debris.
- Once a year, during a dry spell, tip the barrel over and rinse it out with a hose.

Any standing water will begin to smell after a while, especially if it

contains organic matter, such as leaves. Smelly water won't hurt your plants, but it can be a nuisance. To avoid it, use all the water in the barrel within a month of collecting it.

Safety Considerations

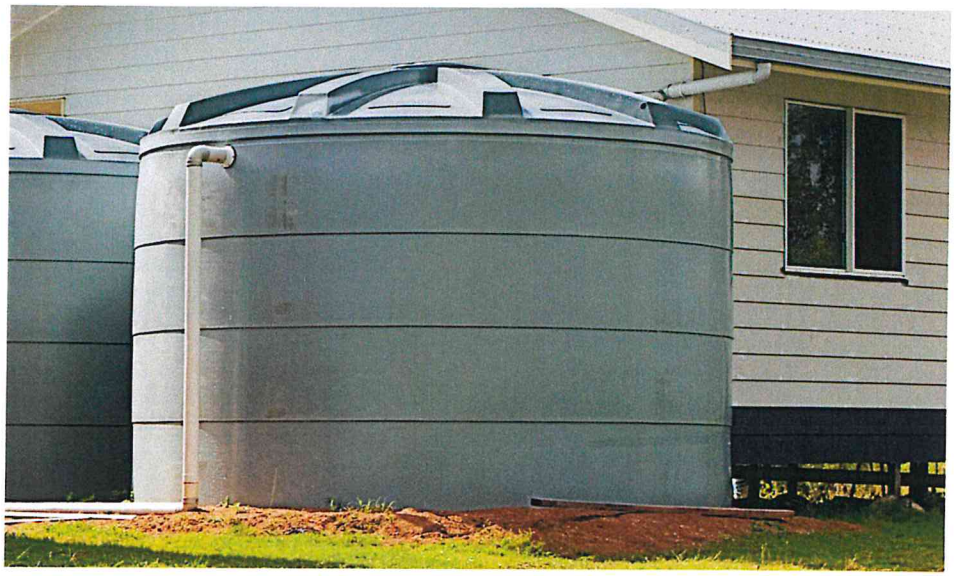
Remember: the water collected in a rain barrel as described in this publication is intended to be used for outside purposes only, such as watering your container plants, landscape, and garden. Also, it's important to safeguard the quality of your drinking water by never submerging a water hose in a rain barrel.

Prevent your rain barrel from serving as a mosquito breeding ground. A well-sealed screen will help keep mosquitoes from getting into your rain barrel. However, mosquito larvae may still wash in from your gutters. You can keep mosquitoes at bay by emptying the barrel regularly. You can also add mosquito dunks to the water. These dunks contain a nontoxic bacterium that kills mosquito larvae. It's safe for your plants, and it will not harm pets or people. You can find this product at most garden-supply stores.

Harvest More Rainwater

If you decide that you want to store even more rainwater, you can connect two or more rain barrels. You can also consider installing a large system using cisterns, which can collect thousands of gallons of water. For information on constructing a larger rainwater-harvesting system, see *Rainwater Harvesting* (GI-404, reprinted courtesy of the Texas A&M AgriLife Extension Service) at TakeCareofTexas.org/resources/rainwater-harvesting.

Texas A&M's AgriLife website discusses rainwater harvesting and lists publications, training programs, and suppliers of rainwater-harvesting equipment.** Visit "Rainwater Harvesting" at rainwaterharvesting.tamu.edu.



Contact the Texas Comptroller's office at 800-252-5555 for questions about the exemption of rainwater harvesting equipment from state sales tax.

***The listing of suppliers is provided by Texas A&M AgriLife Extension solely to inform the reader of the different types of equipment and products that are available for harvesting rainwater. Neither Texas A&M AgriLife Extension nor the TCEQ endorses any particular vendor, manufacturer, or product.*

How to Construct a Rain Barrel

Materials

- 55-gallon polyethylene plastic barrel
- 3/4-inch hose spigot
- 3/4-inch PVC closed nipple
- window screen
- Teflon cement
- water hose (optional)
- bricks or concrete blocks (optional)

Tools

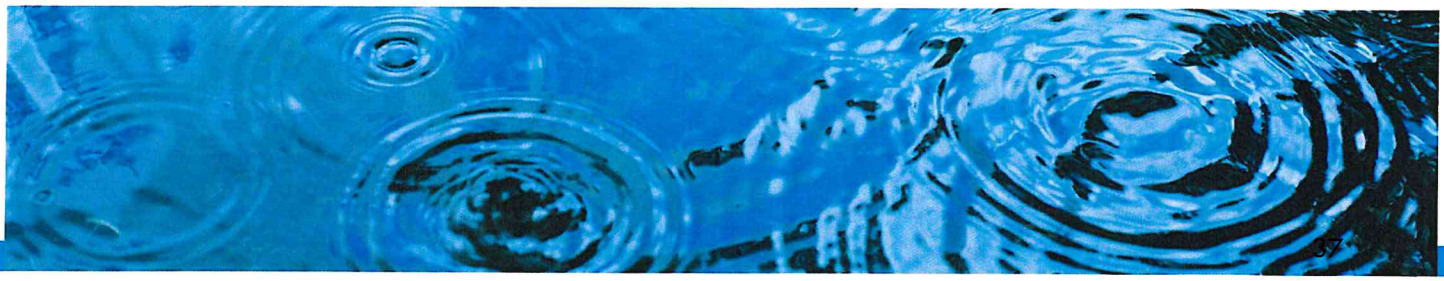
- drill with a 1-inch paddle bit
- utility knife or jig saw

Instructions

- **Inflow.** Use the utility knife or jig saw to cut a hole in the top of the barrel approximately the same diameter as your gutter downspout.
- **Spigot.** Measure 3 to 4 inches from the bottom of the barrel and drill a 1-inch hole. Screw the spigot halfway into the barrel, apply some Teflon cement to the exposed threads, and continue to twist until tight. In addition, you can use a rubber washer, metal washer, and a lock nut to more firmly secure the spigot to the barrel from the interior.
- **Overflow.** Measure 3 to 4 inches from the top of the barrel and drill a 1-inch hole. Twist in the 3/4-inch PVC closed nipple about one-quarter of the way, apply Teflon cement to the exposed threads in the middle portion of the coupling, and continue to screw it in, leaving 1 inch of thread exposed.

  Connect the hose to the pipe coupling overflow spigot at the top of the barrel. You can run this hose into another barrel or to a soaker hose (which will evenly distribute excess water and help avoid flooding).
- **Downspout.** Place the barrel directly below the downspout. You will need to reconfigure the downspout to flow into the hole. If you like, place the barrel on concrete blocks or bricks. Raising the barrel will allow you to get a bucket under the spigot, and will facilitate leveling the area where your barrel will sit.

Cover the hole on the top of the barrel with the window screen to prevent sticks, rocks, or dirt from getting into it. Screens also keep mosquitoes out. Secure the screen with a few bricks or rocks to keep it in place.



Managing 10 Common Texas Yard Pests

Gardening and yard care can give you satisfying results, such as beautiful landscapes and abundant wildlife. However, yard pests can be discouraging, even for the most committed gardener. Learn smart ways to get rid of these 10 common Texas yard pests so that you can better enjoy your landscape, and Take Care of Texas in your yard.

1. Grubs

Grubs are small (1/2 to 1" long), C-shaped, and creamy white, with three pairs of legs. Grubs are the larva stage of the June beetle, or June bug.

Infestation and Attack

Grubs attack St. Augustine, Bermuda, zoysia, and buffalo grasses. They feed on roots and other underground parts, and are most prevalent during the summer and fall months.

Prevention or Solutions

- Only treat when more than 5–10 grubs per square foot are found.
- Apply beneficial nematodes (small, round worms) to the affected areas.
- Choose the most effective time for treatment: mid-June to late July.

2. Chinch Bugs

Adult chinch bugs are small and slender (1/6 to 1/5" long). They have black bodies and whitish wings with black "bases" on their forewings. Recently hatched nymphs are wingless and pinkish-red, with a light-colored band across their backs.

Infestation and Attack

Chinch bugs primarily attack St. Augustine grass, but may feed on zoysia or Bermuda grass as well. They cause expanding, irregular patches of dead or stunted grass surrounded by a halo of yellowing, dying grass.

Prevention or Solutions

- Make your yard a haven for birds and beneficial predator insects, such as big-eyed bugs, by avoiding the wide use of lawn chemicals.
- Check for chinch bug infestation on the grass blades at the edges of affected areas. To test, cut the bottom out of a coffee can, push the can one inch into your turf near the edge of a dead patch, and fill the can with water. If chinch bugs are present, they will float to the surface.
- If there are signs of damage, spot-treat only the infected areas with insecticidal soaps.

3. Fire Ants

Fire ant colonies include a queen (or queens), winged males and females, workers, and brood. Colonies can create mounds up to 18 inches tall.

Infestation and Attack

Fire ants prefer open, sunny areas such as lawns, pastures, and parks. They are most prevalent in spring and fall. Fire ants do not injure turf grass, but their mounds can become unsightly. They are aggressive and cause painful stings.

Prevention or Solutions

- Carefully pour a large pot (about 3 gallons) of boiling water on each mound. This method will kill a mound about 60% of the time and works best after a rain.
- Introduce beneficial nematodes, applying them to moist soil at dusk.
- Choose baits over contact products. Baits are safer to use because they are ant-specific and formulated with very small percentages of the active ingredients. Make sure to use fresh bait, and to apply it when the ants are foraging.
- Organize your neighbors to treat fire ants at the same time, to avoid driving the ants from yard to yard.

4. Aphids

Aphids are tiny (1/16 to 1/8") insects with a soft body, long legs, and antennae. Most aphids are host-plant specific and usually do not move to other species.

Infestation and Attack

Aphids attack new growth or the underside of leaves. They suck sap from plants and excrete clear, sticky "honeydew" onto leaves. This honeydew

Quick Tips to Avoid Pests

- **Irrigate efficiently. Water infrequently, but thoroughly (generally 1 inch, once a week), and do so in the mornings.***
- **Use native and adapted plants, which are better suited to the local environment and are more resistant to pests.**
- **Mow properly, taking off no more than one-third of the grass blade with each mowing.**
- **Choose natural or organic fertilizers, avoid overusing fertilizers, and encourage natural predators such as worms, ladybugs, certain beetles and mites, and birds.**
- **Monitor for pests often to catch infestations early and determine if control is needed; many times, natural predators may make treatment unnecessary.**

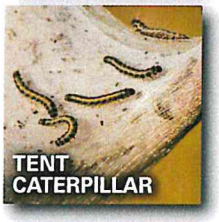
often causes a black, sooty fungus that blocks sunlight from leaves. Typically, aphids attack bedding plants, crepe myrtle, hibiscus, oaks, oleanders, pecan trees, roses, and vegetables.

Prevention or Solutions

- After you identify an infestation, introduce ladybugs, lacewings, and other beneficial insects to your landscape. For best results, follow release instructions carefully and release in an enclosed area.
- Use sticky barriers to prevent ants from tending the aphids and protecting them from natural predators.
- For minor infestations, spray host plants with water at high pressure to dislodge the aphids.
- Use insecticidal soaps and horticultural oils to help control the aphids.
- When appropriate, use row covers, which will physically keep the aphids off vegetable crops while still allowing air, light, and water exchange.

5. Caterpillars


TOMATO HORNWORM


TENT CATERPILLAR


GENISTA CATERPILLAR


SPRING CANKERWORM

Pest caterpillars include the tomato hornworm, the tent caterpillar, the genista caterpillar, and the spring cankerworm.

Caterpillars are the larval stage of butterflies, so butterfly-gardening enthusiasts should expect some caterpillar damage.

Infestation and Attack

Caterpillars can be found year-round but are most prevalent in spring and fall.

Prevention or Solutions

- Do not treat native trees; caterpillar infestations are natural and rarely threaten the health of a tree unless it is already stressed or weakened.
- Monitor infestations of very young caterpillars to see if natural controls such as predators, parasitic wasps, or harsh weather will eliminate the infestation. Try releasing parasitic wasps when caterpillars first appear.
- Dislodge young (small) tent caterpillars with a broom or with high-pressure water sprays, to allow parasitic wasps easier access.
- You can remove by hand egg masses or groups of caterpillars found on trees or branches, or prune them out of the tree and destroy them. You can drop handpicked caterpillars into a bucket of soapy water.
- Use row covers as a barrier in vegetable gardens.
- Treat young caterpillars with Bacillus thuringiensis, but not near butterfly gardens.

6. Fleas

Fleas are tiny insects with hind legs adapted for jumping. They leave black droppings around pet sleeping areas and jump when disturbed.

Infestation and Attack

Fleas can attack pets and people. Flea bites mostly occur on the lower legs and can cause redness and itching. Most adult fleas live on the animal host, although flea eggs and larvae can be found in moist soil in the yard, as well as in bedding and carpet.

Prevention or Solutions

- Keep your house well-vacuumed, especially where your pet rests. Immediately dispose of vacuum bags after use to prevent fleas from escaping back into your home.
- Steam clean carpets to remove organic material, which is food for flea larvae.
- Wash your pet's bedding regularly in hot water. If pets sleep with you, wash your bedding frequently as well.
- Use a flea comb to remove fleas from your pet; drop the fleas in a bucket of soapy water.
- Shampoo your pet regularly with a gentle shampoo to remove fleas and flea eggs. Shampoos containing

Decrease Pesticide Waste in Your Home

To decrease the amount of leftover or unwanted pesticides in your home, use the following guidelines:

- Buy only what you need to do the job.
- Use alternative products that do not contain hazardous materials.
- Pass on your unexpired pesticides in good condition to friends, relatives, or neighbors who can use them.
- Use the product for its intended purpose.

If you have leftover or unwanted pesticides that need to be disposed of, check TCEQ's list of household hazardous waste (HHW) facilities and collection events at www.tceq.texas.gov/p2/hhw/contacts.html. If an HHW service is not available in your area, it is acceptable for households to dispose of leftover or unwanted pesticides in the regular trash.

pesticides are not necessary, because any soapy water will kill fleas.
- If areas of your yard are heavily infested with fleas, treat these areas using a spray of beneficial nematodes. These organisms kill flea larvae but are not harmful to the environment.

7. Mosquitoes

Adult mosquitoes are small, long-legged flies with two scaly wings and long, segmented antennae. Mosquitoes have long piercing and sucking mouthparts. They lay their eggs in still water.

Infestation and Attack

Mosquitoes are found in Texas year-round, but become more prevalent in spring and summer. They are most active between dusk and dawn.

Prevention or Solutions

- Eliminate breeding sites by reducing the amount of standing water in your yard. Use bacterial larvicide tablets to reduce mosquitoes in rain barrels or in permanent bodies of water.
- Light citronella candles to provide short-term relief on patios and other outside areas.
- Wear light-colored, loose-fitting clothing when outside. If you opt to use mosquito repellents, apply to clothing and exposed skin according to the instructions on the label. Once indoors, wash any treated skin with soap and water.
- Repair leaky faucets and outdoor pipes.
- For pets, use topical spot treatments to help repel mosquitoes. Since heartworms are transmitted by mosquitoes, use heartworm medication in conjunction with the repellants.

8. Spider Mites

Adults are tiny (1/150 to 1/50"), spiderlike mites with eight legs and no antennae. They vary in color.

Infestation and Attack

Spider mites lay eggs on the underside of leaves and on buds. They attack fruit trees, tomatoes, marigolds, strawberries, roses, junipers, rosemary, and many house plants.

Prevention or Solutions

- Take a white piece of paper and strike some affected leaves on it—you'll see the mites crawling on the paper.
- Encourage natural enemies like green lacewing larvae, ladybugs, and predatory mites.
- For minor infestations, spray the host plants weekly with high-pressure water, spraying upward from beneath the plant foliage.
- Apply insecticidal soaps or horticultural oils; spray upward from beneath the plant foliage.

9. Snails and Slugs

Snails and slugs have fleshy, soft, slimy, legless bodies (1/2 to 4" long). They range in color from whitish-yellow to black. They are slow-moving and require moisture for survival. Snails have a hard, spiral shell on their backs that provides protection from predators and excessive heat and dryness.

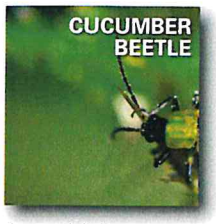
Infestation and Attack

Snails and slugs attack the leaves, flowers, and stems of plants. They can completely devour young vegetable seedlings overnight.

Prevention or Solutions

- Handpick snails and slugs at night when they are active and drop them in a jar of soapy water.
- Attract snails overnight to a hollowed-out melon rind or a shallow container filled with beer or apple cider. Dispose of them in the early morning and replenish the bait often.
- Destroy snail and slug eggs, which look like crystal beads and are often found in large clusters under rocks and debris.
- Eliminate their hiding places, such as under flowerpots and landscape timbers. Place barriers of copper stripping around planters to prevent snails and slugs from reaching the plants.
- Use window-screen material or row covers to protect seedlings.
- Finally, and only if significant plant damage begins to appear, use snail and slug baits as a last resort.

10. Beetles

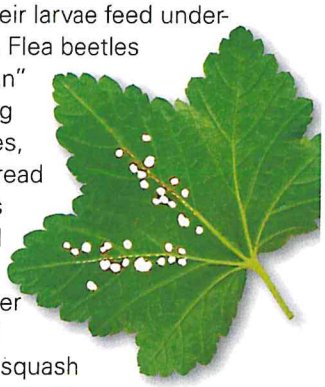


The two most common pest beetles are the flea beetle and the cucumber beetle.

There are several types of beneficial beetles which feed on caterpillars, aphids, and other pests. Helpful beetles include the ground beetle and the ladybird beetle, or ladybug.

Infestation and Attack

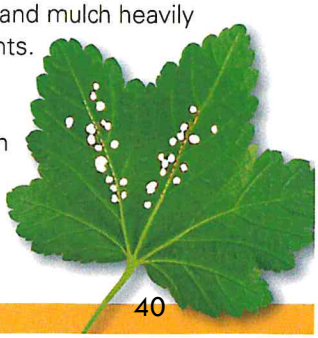
The flea beetle attacks many vegetables, including cucumbers, tomatoes, peppers, and eggplant. Their larvae feed underground on roots. Flea beetles create a "shotgun" pattern of feeding damage on leaves, and may also spread diseases such as potato blight and bacterial wilt.



The cucumber beetle attacks all members of the squash and cucumber family. They cause minimal feeding damage, but they spread diseases, such as bacterial wilt and squash mosaic virus, that can kill plants.

Prevention or Solutions

- Choose disease-resistant varieties of squash, such as "cougar," "sunglo," and "sunray," and irrigate efficiently.
- Use trellises to get your plants off the ground and mulch heavily around the plants.
- Remove dead plant materials and debris from your garden.
- Treat the soil with beneficial nematodes.



Managing Lawn Problems in Texas

Choose Your Landscape

When choosing a landscape for your yard, it is important to consider not only what you want your yard to look like, but the amount of resources and time necessary to maintain it.

In most landscape areas, turf grasses have the highest water demand and the highest maintenance requirements of all plants. Lawn alternatives, such as drought-tolerant native plants and other forms of ground cover, can save water and energy as well as time and money by requiring little maintenance. For more information on selecting a landscape, visit earthkind.tamu.edu.

If you decide to have a lawn, consider planting a less extensive grass landscape and choose a turf that is right for your region and environment. Planting the lowest-water-use turf grass adapted to your region is an effective way to reduce the need for landscape irrigation. Avoid narrow strips or odd shapes of turf grass that will be difficult to irrigate without wasting time and water.

Maintain Your Lawn

Maintaining a healthy turf will help you avoid many common lawn problems, as well as the need for many pesticides—including insecticides, herbicides, and fungicides.

Water Efficiently

A properly watered lawn is more resistant to pests and other lawn problems. However, much of the water used to maintain our landscapes is wasted through inefficient watering techniques. Irrigate efficiently, making sure to:

- water infrequently, yet thoroughly,
- water in the morning, before 10 a.m., and
- wet the soil to a depth of 4–6 inches, and allow the soil to dry out between watering.

For more in-depth watering tips, visit the Water-Efficient Landscapes section on pages 2-6 of this publication.

Mow Properly

Mowing grass too short causes stress, discourages deep root growth, and results in rapid loss of soil moisture.

Mow often enough so that each mowing removes no more than one-third of the grass blade. For example, if you set your cutting height at 2 inches, you should cut your grass before it's more than 3 inches tall.

Practice Grasscycling

Grasscycling refers to the practice of leaving grass clippings on the lawn to decompose into soil. Grasscycling will not only cut down on your watering needs, it will make your turf greener and tougher by preventing common turf diseases and reducing the need for lawn fertilizer. The key to grasscycling is to mow at the proper height and disperse the grass clippings evenly, so that they can work their way down to the soil.

When the mowed grass clippings remain on the yard, they can act as a slow-release lawn fertilizer, while also helping to retain soil moisture. This reduces the need for watering and can eliminate the need for fertilizer. In turn, this helps to keep fertilizers out of storm drains and, as a result, out of rivers, lakes, and bays.

Cultivate Healthy Soil

Grass and other plants can be weak and unhealthy for a variety of reasons. In general, it's important to establish an adequate depth of healthy soil (at least 6 inches under your turf) and aerate your lawn once a year to improve drainage and reduce soil compaction.

If you do encounter a problem in your lawn, try solving it using natural, noninvasive methods. In most cases, compost is the best soil additive you can use. Compost contains micronutrients—such as iron and manganese—that are often absent in synthetic fertilizers. Compost also balances both acidic and alkaline soils, bringing pH levels into the optimum range for nutrient availability.

Don't Let Leaves Pile Up

A thick ground cover of leaves blocks sunlight, which is good for suppressing weed growth in planting beds; but on the lawn, it can also suppress the growth of grass. Mow fallen leaves to create good winter mulch for your lawn or add the leaves to your backyard compost pile.

Common Lawn Problems

Fungal Diseases

Take-All Patch

Take-all patch first appears as a yellowing of the grass and a darkening of the grass roots, followed by a thinning of the turf in irregular shapes. The darkening of the roots indicates rotting, and the roots can rot so extensively that the grass can be easily pulled up.

Infestation and Attack

Take-all patch most commonly affects St. Augustine, zoysia, and Bermuda grasses, and can rot roots so badly that it eventually kills the entire lawn. It spreads mainly during the fall, winter, and spring, when there is more moisture and cool or mild temperatures. However, the symptoms generally do not appear until the hot, stressful days of summer.

Prevention and Solutions

- Maintain good drainage in your lawn area.
- Avoid overfertilization of turf areas, as excessive nitrogen seems to promote take-all patch.
- Raise the mowing height on your mower to reduce stress to your turf.
- Avoid the use of broadleaf herbicides, which may weaken your turf.
- Avoid urea-based fertilizers.

Brown Patch

Brown patch first causes circular patterns of dead grass blades; in two to three weeks, new leaves may emerge in the center of the circular patch, giving diseased areas a donut-shaped appearance. The affected grass turns brown and grass blades rot and break off from the runners.

Infestation and Attack

Brown patch most commonly attacks St. Augustine grass and can spread in an area of 1 to 50 square feet. It occurs in late fall through early spring and is promoted by wet weather or frequent irrigation.

Prevention and Solutions

- Avoid overfertilization or overwatering of your lawn.
- Aerate your lawn once a year.
- At the first sign of the disease, apply a fungicide to the affected area.

Lawn Stresses

Shade Stress

Turf grass that is affected by shade stress (lack of sunlight) thins and disappears, leaving bare patches of soil and/or areas of weeds.

Infestation and Attack

Buffalo and Bermuda grasses do not grow well in shaded areas—these grasses are the most susceptible to shade stress.

Prevention and Solutions

- For planting in shady areas, choose shade-tolerant groundcovers or shade-tolerant turf grasses (such as St. Augustine or zoysia).
- Thin out tree branches a bit to "brighten" shady areas.
- Raise the mowing height on your mower to allow more grass blade to capture sunlight.

Iron Chlorosis

Iron Chlorosis causes the blades of the grass to develop green and yellow stripes, or to turn completely yellow. It occurs in alkaline (high pH) soils with high phosphorus levels, and under cool and wet soil conditions.

Infestation and Attack

St. Augustine grass is most susceptible to Iron Chlorosis.

Prevention and Solutions

- Do not use fertilizers that are high in phosphorus.
- Topdress your turf with 1/4- to 1/3-inch of compost.
- Aerate your lawn once a year.
- For temporary relief, try adding iron supplements to your lawn.

Drought Stress

Grass affected by drought stress looks blue-green or silverish, and individual blades curl. Footprints remain in the lawn after you step on it, and the soil under the lawn is dry.

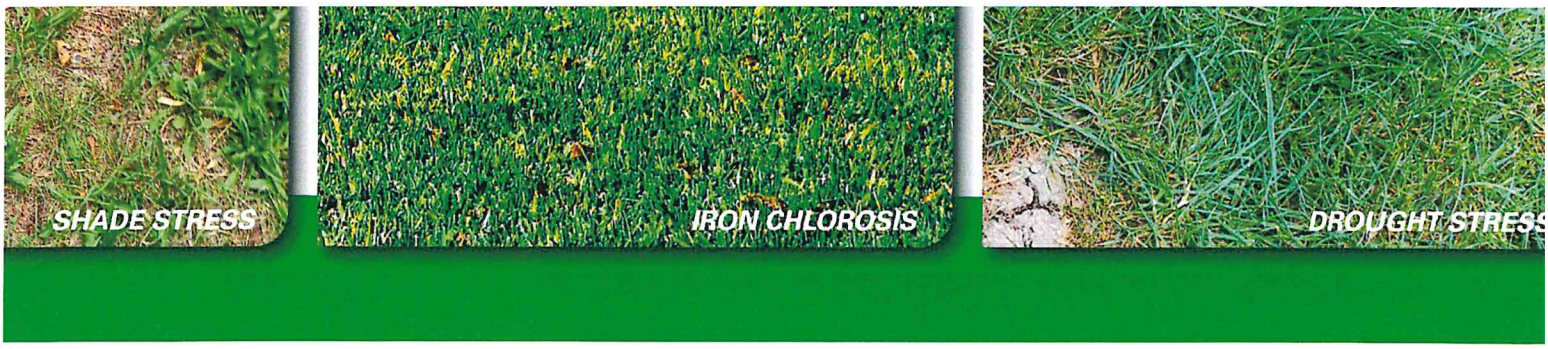
Tolerance to Drought

All turf can survive some drought stress, although some types of turf require less water than others.

- *St. Augustine:* drought tolerant in shade only
- *Bermuda, zoysia:* drought tolerant
- *Buffalo:* very drought tolerant

Prevention and Solutions

- Choose drought-tolerant turf grass.
- Irrigate efficiently.
- For sloped areas, consider alternatives to turf.



Weeds

The two most common types of weeds are:

- *Grassy.* Grassy weeds have jointed, hollow stems. Their leaf blades have veins parallel to the margins and are several times longer than they are wide. Their roots are fibrous and multi-branching, and their flowers are usually inconspicuous.
- *Broadleaf.* Broadleaf weeds often have showy flowers. Their leaves have a network of veins at diverse angles to one another. Their stems are often pithy and they usually have a taproot.

Infestation and Attack

Weeds are often the result of poor-quality turf, rather than being the cause of it. Weeds are aggressive and reproduce quickly, enabling them to invade areas of thin, weak turf.

Prevention and Solutions

- Keep plants healthy—this will help them outcompete weeds.
- Do not let weeds flower or go to seed—this will greatly increase their potential population.
- Do not bring soil with weed seeds or weed roots on-site.
- Use drip irrigation in beds so that you apply water only where you want it—remember, weeds also need water to grow.
- Monitor and remove weeds regularly, before they are established.
- Prevent weeds from growing by blocking light from them or by creating a physical barrier to impede their growth.
- Minimize foot traffic or pet activity in shady areas.

Getting to the Root of the Problem

The Texas A&M AgriLife Extension offers diagnostic labs and services to help you identify the cause of some lawn problems. Grass and other plants can be weak and unhealthy for a variety of reasons, including disease or misapplication of fertilizer.

The best (and only) sure way to know if the soil in your yard lacks sufficient nutrients is to get a soil test from a qualified soil lab. This will tell you exactly what your soil needs, and how much of it.

If you're having trouble identifying potential pathogens in your yard, you can also have diseased plants tested for pathogens. The Texas A&M AgriLife Extension can test field crops, trees, turfgrass, vegetables, fruits, flowers, shrubs, houseplants, or any other type of plant.

To find out more about these diagnostic labs and services, visit agrilifeextension.tamu.edu/browse/diagnostic-labs-services/.

Additional Resources

General Information

Take Care of Texas
TakeCareOfTexas.org

Texas Water Development Board
twdb.texas.gov/conservation

Texas A&M AgriLife Extension Service
agrilifeextension.tamu.edu

Environmental Protection Agency
epa.gov/watersense/outdoor

Yard Care

Take Care of Texas
TakeCareOfTexas.org/in-the-yard

Texas A&M AgriLife Extension, EarthKind
earthkind.tamu.edu

Texas A&M AgriLife Extension Service Integrated Pest Management
landscapeipm.tamu.edu

Lady Bird Johnson Wildflower Center Native Plant Selector
wildflower.org/plants

Take the Pledge!

Visit TakeCareOfTexas.org to pledge to conserve water and energy, and keep our air and water clean.

Pledge Now!

Stay in the Know!

Take Care of Texas provides useful information that can help you conserve water and energy, keep our air and water clean, and reduce waste. Subscribe to the News You Can Use monthly e-newsletter by entering your email address at the bottom of our website

TakeCareOfTexas.org

For More Information, Contact:

Take Care of Texas, MC 118
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087
512-239-0010
educate@tceq.texas.gov

Take Care of Texas™
It's the Only One We've Got!
TakeCareOfTexas.org
A PROGRAM OF TCEQ

DECODING PLASTIC RECYCLING LOGOS

FIND OUT WHICH PLAST BE RECYCLED IN YOUR

NOT ALL PLASTIC CAN BE RECYCLED THR LOCAL PROGRAM. THERE ARE MANY DIFF OF PLASTIC, MAKING IT CHALLENGING F FACILITIES TO ACCEPT ALL PLASTIC PROD

CHECK WITH YOUR LOCAL RECYCLING SE TO LEARN WHAT CODED PLASTICS SHOU RECYCLING BIN.

LOGOS & THEIR SIGNIFICANCE

1 PETE

EXAMPLES:
SODA BOTTLES
FOOD JARS

RECYCLED AS:
TEXTILES, CARPET
FOOD CONTAINERS

2 HDPE

EXAMPLES:
MILK JUGS, SHAMPOO BOTTLES

RECYCLED AS:
NON-FOOD CONTAINERS, SYNTHETIC LUMBER

3 PVC

EXAMPLES:
RIGID PACKAGING, PLUMBING, HOUSE SIDING

RECYCLED AS:
CARPET BACKING, FLOORING

4 LDPE

EXAMPLES
BREAD BAGS
CONTAINER

RECYCLED
GARBAGE BA
LUMBER, SH

5 PP

EXAMPLES
YOGURT CUP
BOTTLES, BO

RECYCLED
CAR BATTER

6 PS

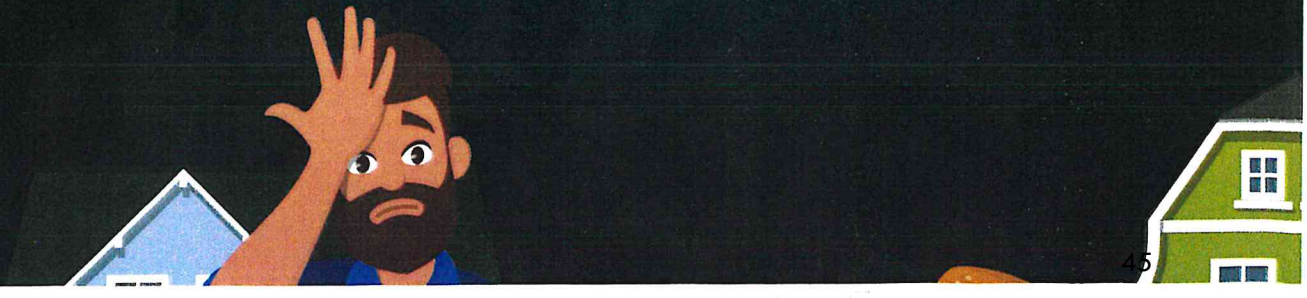
EXAMPLES
POLYSTYREN
COFFEE CUP
CONTAINERS

RECYCLED
THERMAL IN
FOAM PACKA

7 OTHER

EXAMPLES
ALL OTHER T
POSSIBLE M

RECYCLED
BOTTLES AN



THINK before you FLUSH!

Did you know that "flushable wipes" and other trash flushed down the toilet are the leading cause of sewer backups in our community? **Even if the wipes package says "flushable" they should never be flushed!**

Just **a small amount of household trash flushed down the toilet can clog pipes** and cause nasty messes in your home, and expensive sewer back-ups in our city.

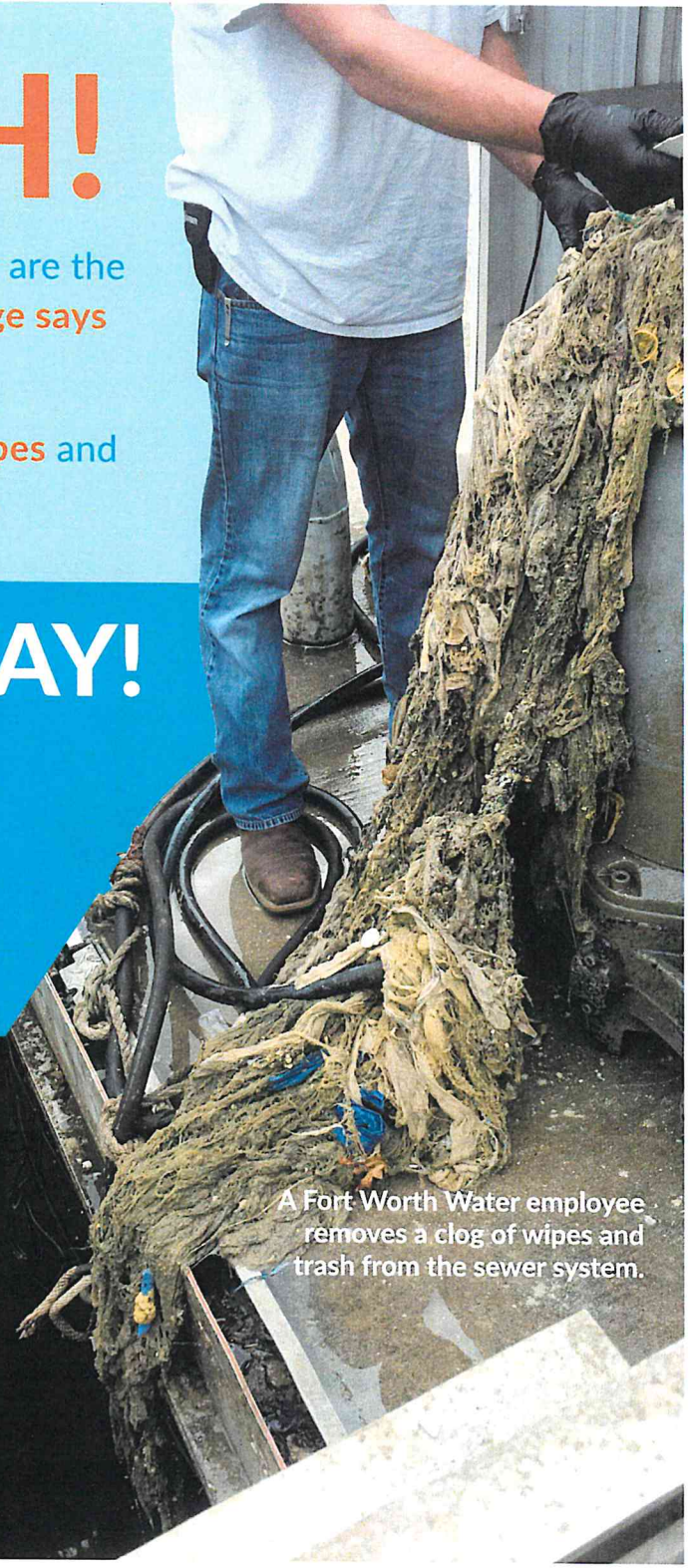
DON'T FLUSH! THROW AWAY!

- Baby & household wipes
- Feminine hygiene products
- Diapers
- Paper towels, tissues, napkins, etc.
- Band-aids & bandages
- Hair
- Whitening strips
- Cotton swabs
- Make-up pads
- Dental floss
- Cat litter
- Condoms & their wrappers

Toilet paper (left) & flushable wipe (right)

Test It Yourself

Take a wipe that's labeled "flushable", put it in a jar of water and shake for thirty seconds. Does it dissolve and break down like toilet paper?



A Fort Worth Water employee removes a clog of wipes and trash from the sewer system.

¡PIENSA antes de BAJARLE!

¿Sabías que las toallitas mojadas y demás basura que se desecha en el sanitario son la principal causa de los reflujos de drenaje en nuestra comunidad? ¡Aunque la envoltura dice que pueden desecharse ahí estas nunca deben desecharse en el sanitario!

Sólo una pequeña cantidad de basura desechada por el sanitario puede bloquear la tubería y causar problemas muy desagradables en casa, y costarle al municipio costosos reflujos.

¡NO LE BAJES!
¡TIRALO EN LA BASURA!

- Toallas mojadas de bebé y del hogar
- Productos femeninos
- Pañales
- Toallas de papel, clínex, pañuelos, etc.
- Vendas & curitas
- Cabello
- Tiras blanqueadoras
- Algodón
- Toallas de maquillaje
- Hilo dental
- Arena para gatos
- Condones & su envoltura

Papel sanitario (izquierdo) & toallita mojada (derecho)

Compruébalo Tú Mismo

Coloca una toallita mojada, que según "puede" desecharse en el sanitario, dentro de un frasco con agua y agítalo por unos 30 segundos. ¿Se disolvió y se deshizo como el papel sanitario?

Empleado de Fort Worth Agua removiendo un tapón de toallitas mojadas y basura del sistema [illegible]

Ponga la basura en su lugar

No vierta mantecas, aceites y grasas al fregadero porque podrían tapar las tuberías, ocasionando reparaciones costosas y contaminación ambiental. Recoléctelas en un recipiente y arrójelas a la basura.

Mantener las llantas correctamente infladas puede prolongar su vida útil unas 5,000 millas. Cuando ya no estén en condiciones de ser utilizadas, recíclelas.

No tire las pilas recargables a la basura. Recíclelas en las ferreterías y tiendas de artículos electrónicos locales o en los sitios comunitarios de recolección, según disponibilidad.

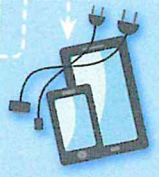
Recicle el aceite de motor usado. El aceite usado de un solo cambio de aceite puede contaminar 1 millón de galones de agua dulce, es decir, el suministro necesario para abastecer a 50 personas durante un año.

1 millón = 50 personas

Cada texano genera alrededor de seis libras y media de basura por día. Para reducir la cantidad de residuos, compre menos cosas. Adquiera solo aquello que necesite, opte por productos reutilizables y evite los artículos que tengan mucho embalaje.

6.5 lb por día

En el hogar promedio hay 28 dispositivos electrónicos. Contemple la posibilidad de comprar artículos electrónicos reparados. También puede donar o reciclar productos electrónicos usados si ya no funcionan.



Si hay una oportunidad de recolección en su comunidad, lleve los residuos domésticos peligrosos, tales como bombillas fluorescentes usadas, limpiadores de desagües y pesticidas a un sitio o evento de recolección comunitaria.

Artículos tales como los alimentos, los restos de poda, el papel, el vidrio, el metal y el plástico representan más del 80 por ciento de los residuos domésticos. Haga una contribución significativa al reciclar y compostar con la mayor cantidad de estos elementos que le sea posible.

Para obtener más información para reciclar y desechar sus residuos, visite nuestro sitio web: TakeCareOfTexas.org/es/tierra.

Take Care of Texas
TakeCareOfTexas.org

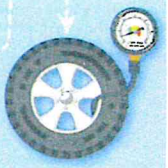
COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS

¿Cómo le parece nuestro servicio al cliente?
tceq.texas.gov/goto/encuestadelcliente

Put Waste in Its Place

Don't put fats, oil, or grease down the drain. It can cause pipes to clog, resulting in costly repairs and environmental contamination. Collect them in a container and throw them in the trash.

Keeping your tires properly inflated can extend their life by almost 5,000 miles. When your tires can no longer be used, recycle them.



Don't throw rechargeable batteries in the trash. Recycle them at your local home improvement and electronics retailers or community collection drop-off sites, where available.

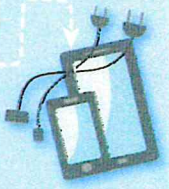
Recycle used motor oil. The used oil from one oil change can contaminate 1 million gallons of fresh water – a year's supply for 50 people.

1 million = 50 people

Each Texan generates about six and a half pounds of garbage each day. Reduce waste by buying less. Purchase only what you need, buy reusable products, and avoid items with a lot of packaging.

6.5 lbs per day

The average household has 28 electronic devices. Consider purchasing refurbished electronics. Also, donate used electronics or recycle these devices if they are no longer working.



If a collection opportunity exists in your community, take household hazardous waste—such as used fluorescent light bulbs, drain cleaner, and pesticides—to a community collection site or event.

Items such as food, yard trimmings, paper, glass, metal, and plastics account for over 80 percent of household trash. Make a huge impact by composting and recycling as many of these items as possible.

Check out our website for resources for recycling and disposing of your waste, visit TakeCareOfTexas.org/land.

Take Care of Texas
TakeCareOfTexas.org

takecareoftexas.org/publications

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

How is our customer service?
tceq.texas.gov/customersurvey

GI-448 (7/16)

SEIS FORMAS DE

CUIDAR A TEXAS

1. Reciclar
2. Ahorrar Agua
3. Conservar Energía
4. Mantener el Aire Limpio
5. Reutilizar las Cosas
6. No Tirar Basura en la Calle

Take Care of Texas
TakeCareOfTexas.org

TakeCareOfTexas.org/publications
Impreso en papel reciclado y utilizando tinta vegetal. M-95 anteriormente GI-324 (rev. 01/22)

SIX WAYS TO

TAKE CARE OF TEXAS

1. Recycle
2. Save Water
3. Conserve Energy
4. Keep the Air Clean
5. Reuse Things
6. Don't Litter

Take Care of Texas
TakeCareOfTexas.org

TakeCareOfTexas.org/publications
Printed on recycled paper using vegetable-based ink.
M-95 formerly GI-324 (rev. 01/22)

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Municipal Employee Training Program***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue to provide annual training to City employees. Document the number of employees trained and type of materials used. Ensure additional information is included is annual training.

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 City provides training to new employees. The City typically uses NCTCOG's Preventing Stormwater Pollution Prevention training video. NCTCOG's Preventing Stormwater Pollution video was shown on July 13, 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.

It is important that City staff be educated on stormwater pollution, so that City activities for Operation and Maintenance do not contribute to any pollution to the storm drains. In addition, the more staff knowledgeable about common pollutants to stormwater, and proper practices, the more stormwater pollutants can be reduced 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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Business Education Program***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Develop letter with recommended best management practices for preventing stormwater pollution unique to each business type (gas station, restaurants, etc.) Send letter to one group of businesses annually. Document number of businesses contacted.

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 City of Forest Hill identified restaurants, auto shops, gas stations, hotels, and dental to receive stormwater education. In 2023, the City sent letters to all auto shops in the City to educate them on the proper disposal of motor oil.

   (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.

   Giving business owners information and tips about stormwater pollution is an important part of the stormwater management program. Educating business owners and providing proper practices can reduce stormwater pollution in 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 ☒

CITY OF Forest Hill
PERMIT DEPARTMENT

November 1, 2023

To: All Business Owners/Managers in the City of Forest Hill that dispose of used motor oil

From: Venus M. Wehle, PCED
City Manager

Cc: Roberto Duenes, Public Works Director
Valeria Rios, Utility Billing & Permit Department Supervisor
Carl Johnson, Customer Service Technician, Water Department

The City of Forest Hill City Council passed Ordinance #2019-17 regulating the legal disposal of used motor oil. With the passage of this law, businesses in Forest Hill that dispose of used motor oil must document all removals and keep these record, making them available for City inspection. As well, your business must obtain Manifest tickets from the Permit Department.

Our Customer Service Technician, Mr. Carl Johnson, will be conducting regular inspections and can provide you with information regarding Manifest Tickets and pertinent permits that you may obtain through the Permit Department.

Questions can be directed to:
cjohnson@foresthilltx.org; 682-600-1051
water@foresthilltx.org; 817-568-3030
permits@foresthilltx.org; 817-806-4561

Thank you for your cooperation.

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Texas Smartscape Program***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue to make Texas Smartscape bookmark available at City offices and Public Library. Review and update Texas Smartscape information on website as necessary 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.

   A Texas SmartScape flyer and bookmarks are provided on the City's webpage, City office, library, and Public Works facility. The City orders 500 bookmarks in the spring to restock at City 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.

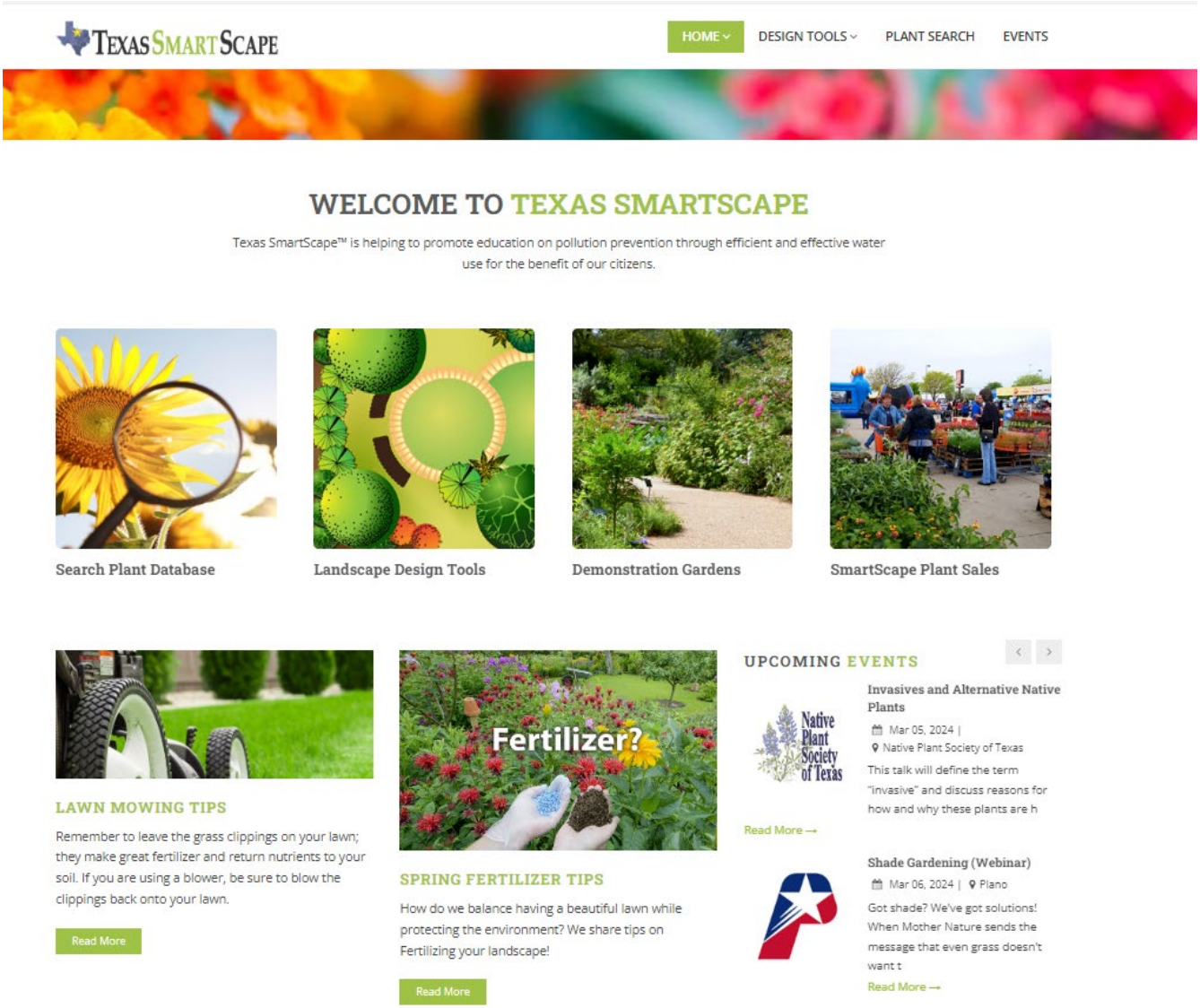
   The Texas Smartscape program provides information to homeowners and commercial businesses regarding native and adaptive plants to use during landscaping. The classes provide residents with ways to reduce the use of pesticides, fertilizers, and how to be environmentally friendly gardeners.

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

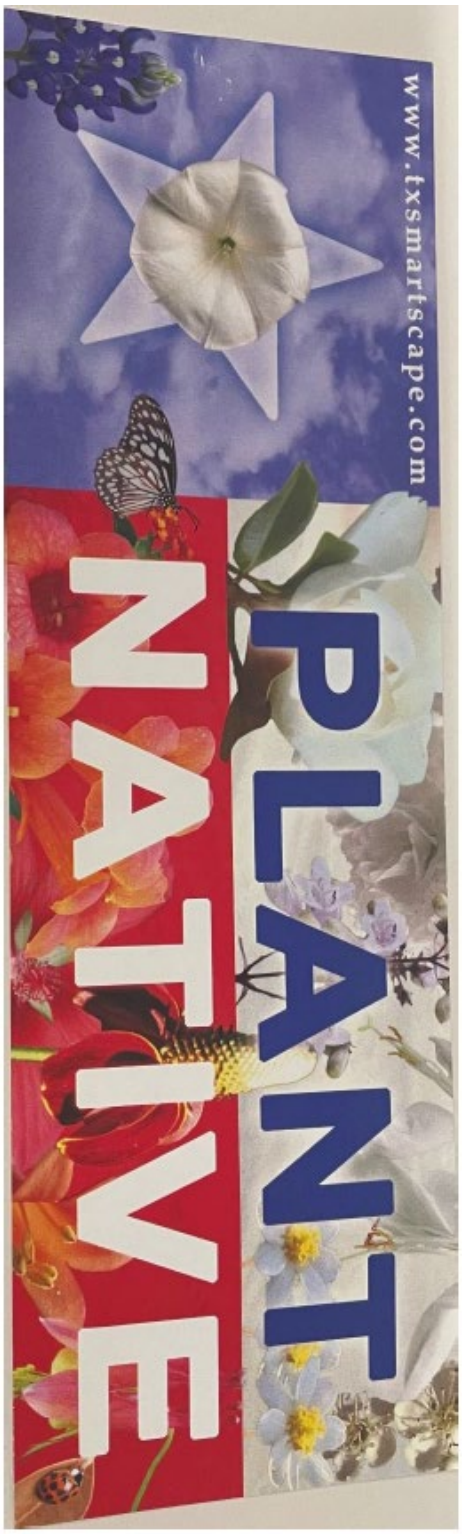
   (a) If so, please explain.

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

Link to Texas Smartscape Website



Texas Smartscape Bookmark



STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Fertilizer and Pesticide Use Education***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Include fertilizer and pesticide use information on the City website and review annually for any necessary updates.

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 City provides a link for correct usage of pesticides and fertilizers on the City's Website through the Texas Smartscape Website. The City is in the process in researching other forms of media to provide education to its residents.

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

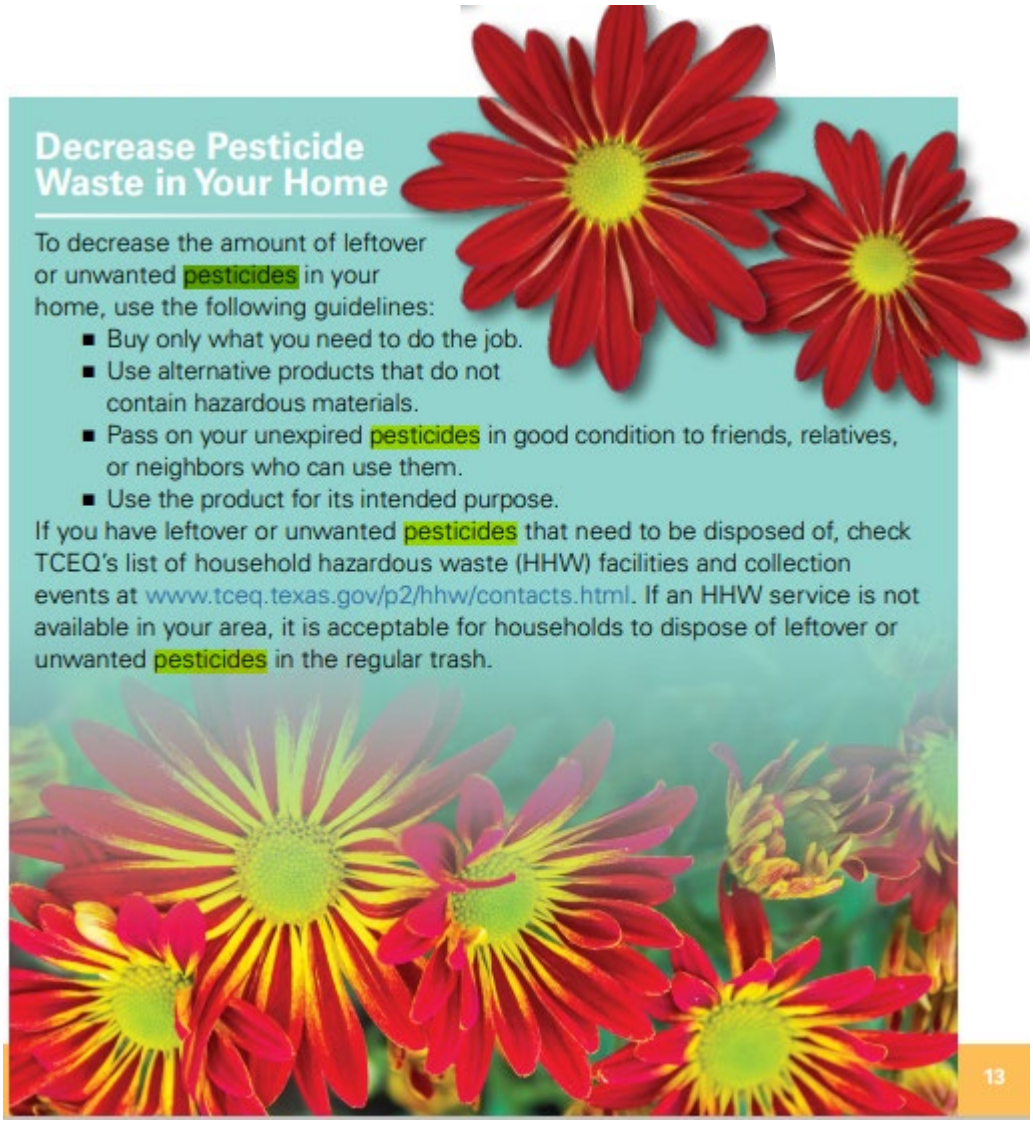
2. Was this BMP appropriate to meet the intended MCM(s)? Yes ☒ No ☐
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   Educating the public about proper lawn and garden practices can lead to a reduction of 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 ☒

Pesticide Information



Decrease Pesticide Waste in Your Home

To decrease the amount of leftover or unwanted pesticides in your home, use the following guidelines:

- Buy only what you need to do the job.
- Use alternative products that do not contain hazardous materials.
- Pass on your unexpired pesticides in good condition to friends, relatives, or neighbors who can use them.
- Use the product for its intended purpose.

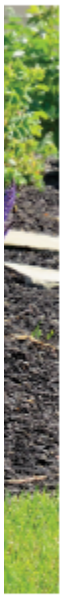
If you have leftover or unwanted pesticides that need to be disposed of, check TCEQ's list of household hazardous waste (HHW) facilities and collection events at www.tceq.texas.gov/p2/hhw/contacts.html. If an HHW service is not available in your area, it is acceptable for households to dispose of leftover or unwanted pesticides in the regular trash.

13

Fertilizer Information

Fertilizer Use

More is not always better when applying synthetic fertilizers. There are less toxic, even natural, substitutes that are just as effective.



If you do choose to use fertilizers, however, it is very important to your health and the environment to always follow the manufacturer's directions, use only the recommended amount, and adjust your watering accordingly.

Be careful not to overfertilize, which can weaken turf and contribute to water pollution. Excess fertilizer can get washed away by overwatering or a rainstorm—wasting your money and contaminating nearby waterways with pollution.

Choose natural or organic fertilizers, such as compost, which typically slow-release their nutrients and can often be used in smaller amounts.

The best times to apply fertilizer, if it's needed, are at the beginning and end of the growing season, which will vary according to the temperature range in your region.

To prevent runoff pollution, do not overwater after applying fertilizer and avoid fertilizing just before a rainstorm.

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Post SWMP and Annual Report on City Website***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Post the annual reports to the City's website no later than 30 days after the due date.

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 City provided the Year 4 Annual Report on the City's website.

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

   The City's Year 2 – Year 3 reports will be posted on the City's website for residents.

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

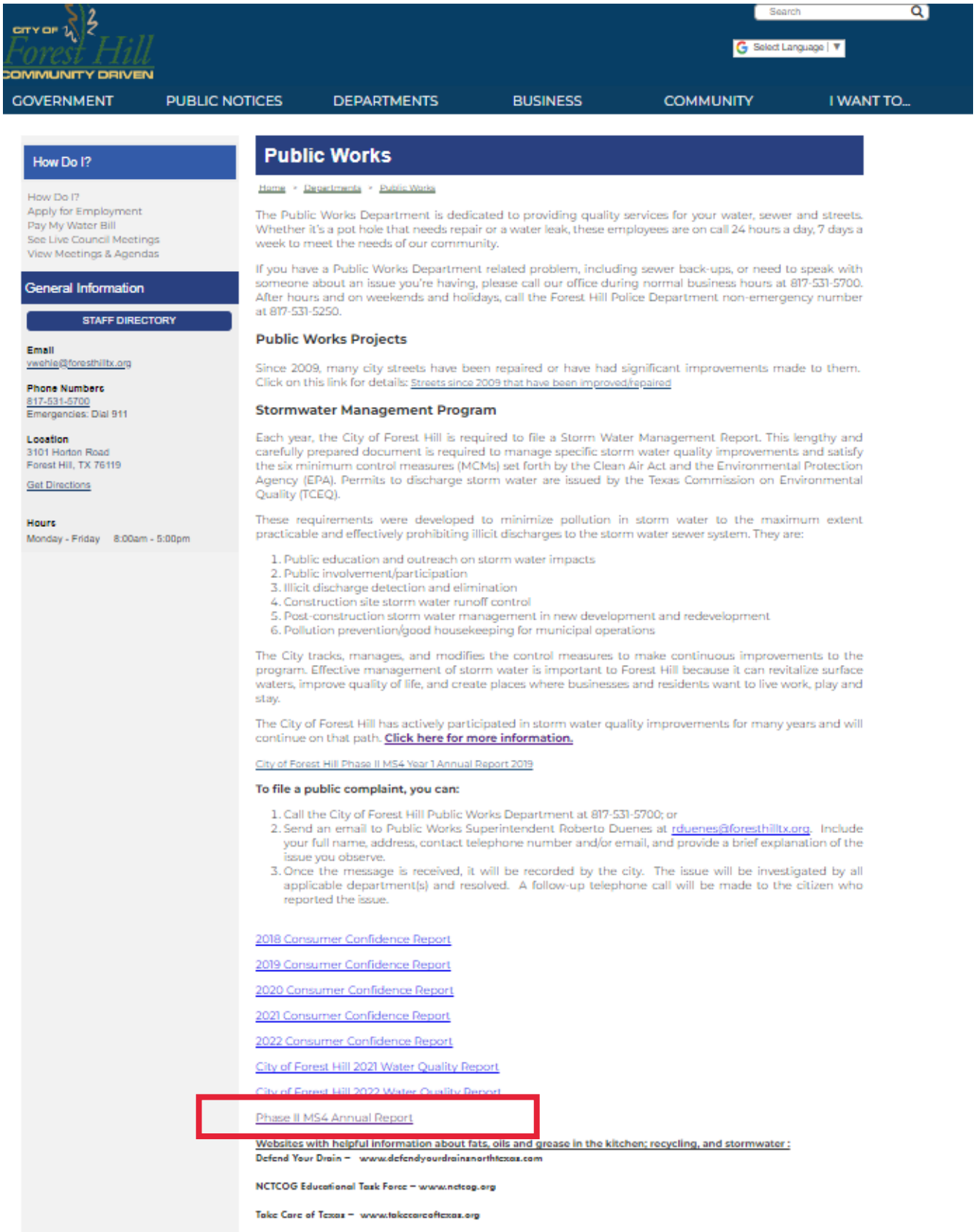
3. Was this BMP considered to be successful? Yes ☒ No ☐
   (a) Please explain.

   The SWMP and annual reports inform residents about the program and outlines the City's efforts in reducing stormwater pollution. Informing residents on how the City actively addresses stormwater pollution can encourage residents to play their part 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 ☒

City Website



STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Review the SWMP and MCM Implementation Procedures***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Annual review the SWMP and MCM implementation procedures. Update if necessary.

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 City has reviewed the Stormwater Management Program and each individual BMP. There are no revisions deemed necessary for this year.

   (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.

   Reviewing the SWMP and BMPs allows for the City to revise the program if necessary. It is important for the BMPs to be clear, specific, and measurable.

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:	**Public Education, Outreach, and Involvement**
BMP Title:	***Clean City Commission***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue to meet monthly and solicit public input and involvement in cleanup activities.

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

   Clean City Commission meetings are monthly and are advertised on the City's website.

   (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 a Clean City Commission helps in the effort of reducing the amount of trash, debris, and pollutants that can enter into waterways. It also gets citizens involved in initiatives to protect water quality.

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 ☒

Clean City Commission Meetings

2023

Date & Time	Name	Resources
Monday, January 9 5:00 PM	Parks, Recreation and Clean City Commission Meeting	**Agendas** PRCCC Agenda 01-09-2023.pdf **Minutes** PRCCC Minutes 01-09-2023.pdf
Monday, February 13 5:00 PM	Parks, Recreation, and Clean City Commission Meeting	**Agendas** PRCCC Agenda 02-13-2023.pdf **Minutes** PRCCC Minutes 02-13-2023.pdf
Monday, March 13 5:00 PM	Parks, Recreation, and Clean City Commission Meeting	**Agendas** PRCCC Agenda 03-13-2023.pdf **Minutes** PRCCC Minutes 03-13-2023.pdf
Monday, April 10 5:00 PM	Parks, Recreation and Clean City Commission Meeting Cancellation	**Agendas** PRCCC Notice of Cancellation 04-10-2023.pdf
Monday, May 8 5:00 PM	Parks, Recreation, and Clean City Commission	**Agendas** PRCCC Agenda 05-08-2023.pdf **Minutes** PRCCC Minutes 05-08-2023.pdf
Monday, June 12 5:00 PM	Parks, Recreation and Clean City Commission Meeting	**Agendas** PRCCC Agenda 06-12-2023.pdf **Minutes** PRCCC Minutes 06-12-2023.pdf
Monday, July 10 5:00 PM	Parks, Recreation and Clean City Commission Meeting	**Agendas** PRCCC Agenda 07-10-2023.pdf **Minutes** PRCCC Minutes 07-10-2023.pdf
Monday, August 14 5:00 PM	Parks, Recreation, and Clean City Commission Meeting	**Agendas** PRCCC Agenda 08-14-2023.pdf **Minutes** PRCCC Minutes 08-14-2023.pdf
Monday, September 11 5:00 PM	Parks, Recreation, and Clean City Commission Meeting-Cancelled	**Agendas** PRCCC Agenda 09-11-2023.pdf
Monday, October 9 5:00 PM	Parks, Recreation, and Clean City Commission Meeting	**Agendas** PRCCC Agenda 10-09-2023.pdf **Minutes** PRCCC Minutes 10-09-2023.pdf
Monday, November 13 5:00 PM	Parks, Recreation, and Clean City Commission Meeting Cancellation	**Agendas** PRCCC Notice of Cancellation 11-13-2023.pdf
Monday, December 11 5:00 PM	Parks, Recreation, and Clean City Commission Meeting Cancellation	**Agendas** PRCCC Notice of Cancellation 12-11-2023.pdf

Clean City Commission Meeting Agendas

AGENDA
PARKS, RECREATION, AND CLEAN CITY COMMISSION
February 13, 2023 – 5:00 P.M.

Notice is hereby given that on the 13th day of February 2023 the Parks, Recreation and Clean City Commission of the City of Forest Hill will hold a Regular Meeting at 5:00 p.m., in the City of Forest Hill Council Chambers, 3219 California Parkway, Forest Hill, Texas, 76119, to consider the following items:

1. **Call to Order**

   Invocation

   Pledge of Allegiance to the U.S. Flag and the Texas Flag

2. **Citizens Forum:** At this time, any person who desires to speak on any item posted on the agenda or any person with business before the Parks, Recreation, and Clean City Commission not scheduled on the agenda may speak to the Commission, provided that a "Speaker's Request Form" has been completed and provided to the City Secretary before the start of the Commission meeting. Speakers are limited to a maximum of three (3) minutes. The Commission cannot respond to matters not listed on the agenda until scheduled at a future meeting. Please direct all comments to the Chairperson of the Commission. Citizens are to refrain from personal attacks.

3. **Consent Agenda:**

   All matters listed under Consent Agenda are considered to be routine by the Parks, Recreation, and Clean City Commission and will be enacted by one motion. There will not be a separate discussion of these items unless a Commissioner requests, in which event, the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

   a) Consider approval of meeting minutes for the January 9, 2023 meeting.

4. **Deliberation Agenda:**

   a) Discuss and consider action on the Spring Cleanup event set for Saturday, April 15, 2023.

   b) Discuss and consider action on events to consider for 2023.

5. **Meeting:** Next Regular meeting will be March 13, 2023

6. **Adjournment**

AGENDA
PARKS, RECREATION, AND CLEAN CITY COMMISSION
May 8, 2023 – 5:00 P.M.

Notice is hereby given that on the 8th day of May 2023 the Parks, Recreation and Clean City Commission of the City of Forest Hill will hold a Regular Meeting at 5:00 p.m., in the City of Forest Hill Council Chambers, 3219 California Parkway, Forest Hill, Texas, 76119, to consider the following items:

1. **Call to Order**

   Invocation

   Pledge of Allegiance to the U.S. Flag and the Texas Flag

2. **Citizens Forum:** At this time, any person who desires to speak on any item posted on the agenda or any person with business before the Parks, Recreation, and Clean City Commission not scheduled on the agenda may speak to the Commission, provided that a "Speaker's Request Form" has been completed and provided to the City Secretary before the start of the Commission meeting. Speakers are limited to a maximum of three (3) minutes. The Commission cannot respond to matters not listed on the agenda until scheduled at a future meeting. Please direct all comments to the Chairperson of the Commission. Citizens are to refrain from personal attacks.

3. **Presentation:**

   a) Certificate of Appreciation for the ZFT (Zone Fitness Training) Run Club of Dallas and Community Learning Center of Forest Hill.

4. **Consent Agenda:**

   All matters listed under Consent Agenda are considered to be routine by the Parks, Recreation, and Clean City Commission and will be enacted by one motion. There will not be a separate discussion of these items unless a Commissioner requests, in which event, the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

   a) Consider approval of meeting minutes for the March 13, 2023 meeting.

5. **Deliberation Agenda:**

   a) Discuss and review the Spring Cleanup event held on Saturday, April 15, 2023.

   b) Discuss and consider action on Yard of the Month 2023.

   c) Discuss and consider action on Family Fun Day 2023.

6. **Meeting:** Next Regular meeting will be June 12, 2023

AGENDA
PARKS, RECREATION, AND CLEAN CITY COMMISSION
September 11, 2023 – 5:00 P.M.

Notice is hereby given that on the 11th day of September 2023 the Parks, Recreation and Clean City Commission of the City of Forest Hill will hold a Regular Meeting at 5:00 p.m., in the City of Forest Hill Council Chambers, 3219 California Parkway, Forest Hill, Texas, 76119, to consider the following items:

1. **Call to Order**

   Invocation

   Pledge of Allegiance to the U.S. Flag and the Texas Flag

2. **Citizens Forum:** At this time, any person who desires to speak on any item posted on the agenda or any person with business before the Parks, Recreation, and Clean City Commission not scheduled on the agenda may speak to the Commission, provided that a "Speaker's Request Form" has been completed and provided to the City Secretary before the start of the Commission meeting. Speakers are limited to a maximum of three (3) minutes. The Commission cannot respond to matters not listed on the agenda until scheduled at a future meeting. Please direct all comments to the Chairperson of the Commission. Citizens are to refrain from personal attacks.

3. **Consent Agenda:**

   All matters listed under Consent Agenda are considered to be routine by the Parks, Recreation, and Clean City Commission and will be enacted by one motion. There will not be a separate discussion of these items unless a Commissioner requests, in which event, the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

   a) Consider approval of meeting minutes for the August 14, 2023 meeting.

4. **Deliberation Agenda:**

   a) Discuss and consider action on Yard of the Month 2023

   b) Discuss and consider action on the Fall Cleanup event to be held on Saturday, November 11, 2023.

5. **Meeting:** Next Regular meeting will be October 9, 2023

6. **Adjournment**

MINUTES
PARKS, RECREATION, AND CLEAN CITY COMMISSION
May 8, 2023

The Parks, Recreation, and Clean City Commission met on the above date at 5:00 p.m. with Chairwoman Pearl Jones presiding. The following Commissioners and Officials were present, Larry Taylor, Glady Hardeman, Kengee Ford, Venus Wehle, Interim City Manager, Roberto Duenes, Director of Public Works, and Amy Anderson, City Secretary.

Commissioner Albert Harris, Commissioner Darryl Givens, and Commissioner Rayford Johnson were absent.

1. **Call to Order**

   With a quorum present, Chairwoman Jones called the meeting to order at 5:00 p.m.

   Invocation – Commissioner Ford led the invocation.

   Pledge of Allegiance to the U.S. Flag and the Texas Flag – led by Chairwoman Jones

2. **Citizens Forum:** At this time, any person who desires to speak on any item posted on the agenda or any person with business before the Parks, Recreation, and Clean City Commission not scheduled on the agenda may speak to the Commission, provided that a "Speaker's Request Form" has been completed and provided to the City Secretary prior to the start of the Commission meeting. Speakers are limited to a maximum of three (3) minutes. The Commission cannot respond to matters not listed on the agenda until scheduled at a future meeting. Please direct all comments to the Chairperson of the Commission. Citizens are to refrain from personal attacks.

   None.

3. **Presentation:**

   a) Certificate of Appreciation for the ZFT (Zone Fitness Training) Run Club of Dallas and Forest Hill Community Learning Center.

      Chairwoman Jones stated the certificates were provided to the groups via Venus Wehle and Albert Harris.

4. **Consent Agenda:**

   All matters listed under Consent Agenda are considered to be routine by the Parks, Recreation, and Clean City Commission and will be enacted by one motion. There will not be a separate discussion of these items unless a member requests, in which event, the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

   a) Consider approval of meeting minutes for the March 13, 2023 special called meeting.

      Commissioner Ford made a motion to approve the Consent Agenda. Commissioner Hardeman seconded the motion. The motion carried unanimously.

5. Deliberation Agenda:

a) Discuss and review the Spring Cleanup event held on Saturday, April 15, 2023.

Commissioner Taylor stated the event was a great success and Commissioner Ford was appreciative of the safety and efficiency of the event.

The statistics included the following.

379 vehicles, 260 tons, 14 containers, 700 tires, and 35 volunteers.

Chairwoman Jones thanked Public Works for all their hard work and further thanked the Commission and Council for attending the event and helping.

The Commission did discuss further cleanup events going on until 2:00 p.m. Roberto Duenes stated they would be ok with the time change.

Discussion only item. No motion is required.

b) Discuss and consider action on Yard of the Month 2023.

Chairwoman Jones addressed the Commission on behalf of Commissioner Johnson.

A training session was held for the Yard of the Month judges to go over the program.

A note was sent to the Citizens on Patrol asking for assistance with addresses. The members can simply write down addresses and put them in the utility payment box at City Hall.

Chairwoman Jones stated the Commission must provide photos promptly for Yard of the Month to be presented monthly. Each Commissioner should provide at least five (5) photos that are clear for the judges and need to be from the four (4) quadrants in the City.

c) Discuss and consider action on Family Fun Day 2023.

Chairwoman Jones addressed the Commission on behalf of Commissioner Givens.

The event for 2023 will be held on Saturday, July 22nd from 9:00 a.m. – 1:00 p.m.

The following events were considered.

Vendors at the event. However, they cannot sell merchandise but can do giveaways. The Commission decided not to proceed with vendors at this event.

Soccer games, football throws, horseback riding, train rides, and a pony carousel. Events need to be those that are family-friendly and popular. Approximately 12-15 events are needed.

Food will be the same as in previous years hot dogs, chips, water, and sno cones. Commissioner Hardeman will oversee the food and will need volunteers and a grill.

Due to the time of the year and the heat, cooling stations will be needed along with coolers with ice and water.

Donations will be needed for bingo and kid giveaways.

The budget for the event is $3,000.00.

Discussion only item. No motion is required.

6. Adjournment

Chairwoman Jones adjourned the meeting at 5:57 p.m.

ATTEST:

Amy L. Anderson, TRMC, CMC
City Secretary

APPROVED:

Pearl Jones, Chairwoman

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Public Education, Outreach, and Involvement**
BMP Title:	***Citywide Litter Cleanup***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing citywide program and include information on all events on website as appropriate. Annually document the number and dates of citywide events, person attending, and estimate trash removed for each 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.

   In Year 5, the City advertised and hosted the a Spring and Fall Citywide Litter Event on April 15, 2023 and November 11, 2023. The meeting dates and a sample of agendas and minutes are found below. All agendas and minutes can be found in links on the City's website.

   (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 program is effective and allows residents to dispose of bulk trash debris. The program is used to keep Forest Hill clean and reduce the potential for illegal dumping in the City.

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 ☒

Parks & Recreation/Clean City Commission

YARD OF THE MONTH * FAMILY FUNDAY * HOLIDAY LIGHTS

CITYWIDE CLEAN UP * KEEP TEXAS BEAUTIFUL

Family Funday @ Griggs Park

Citywide Clean Up

CITY OF Forest Hill COMMUNITY DRIVEN

YEAR IN REVIEW
PARKS
RECREATION
CLEAN CITY
COMMISSION

Spring 2023 Citywide Clean Up Statistics

- Vehicles 379
- Containers 14
- Debris/Trash 260 Tons
- Tires 700
- Volunteers 35

Fall 2023 Citywide Clean Up Statistics

- Vehicles 160
- Containers 10
- Debris/Trash 104 Tons
- Tires 350
- Volunteers 20

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Storm Sewer Map***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Review the map annually to ensure that any new outfalls operated by the City and any other information useful to the program are included.

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 City has completed a map of the storm drain system outfalls, storm drains, and receiving waters. There was no new development this year, so no update was necessary this year.

   (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 storm sewer map is vital to the success of the illicit discharge detection and elimination program. The map is used to track the location of upstream pollutant discharges.

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:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Public Reporting***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Annually review existing reporting procedures posted on City website. Revise if necessary. Annually document the number of illicit discharges and spill complaints 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.

   The City has posted a phone number for residents and business owners to report illegal dumping and illicit discharges on the City's website. The existing reporting procedures were reviewed and deemed no changes necessary. The City did not receive reports of illicit discharges from the public for Year 5. The City responded to one sanitary sewer overflow that was reported to the TCEQ which was investigated and resolved.

   (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.

   Allowing the public to be part of a reporting system helps target and address illicit discharges in a timely manner.

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 ☒

City Website

How Do I?

How Do I?
Apply for Employment
Pay My Water Bill
See Live Council Meetings
View Meetings & Agendas

General Information

Email
vwehle@foresthilltx.org

Phone Numbers
817-531-5700
Emergencies: Dial 911

Location
3101 Horton Road
Forest Hill, TX 76119
Get Directions

Hours
Monday - Friday 8:00am - 5:00pm

Public Works

Home » Departments » Public Works

The Public Works Department is dedicated to providing quality services for your water, sewer and streets. Whether it's a pot hole that needs repair or a water leak, these employees are on call 24 hours a day, 7 days a week to meet the needs of our community.

If you have a Public Works Department related problem, including sewer back-ups, or need to speak with someone about an issue you're having, please call our office during normal business hours at 817-531-5700. After hours and on weekends and holidays, call the Forest Hill Police Department non-emergency number at 817-531-5250.

Public Works Projects

Since 2009, many city streets have been repaired or have had significant improvements made to them. Click on this link for details: Streets since 2009 that have been improved/repaired

Stormwater Management Program

Each year, the City of Forest Hill is required to file a Storm Water Management Report. This lengthy and carefully prepared document is required to manage specific storm water quality improvements and satisfy the six minimum control measures (MCMs) set forth by the Clean Air Act and the Environmental Protection Agency (EPA). Permits to discharge storm water are issued by the Texas Commission on Environmental Quality (TCEQ).

These requirements were developed to minimize pollution in storm water to the maximum extent practicable and effectively prohibiting illicit discharges to the storm water sewer system. They are:

1. Public education and outreach on storm water impacts
2. Public involvement/participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post-construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations

The City tracks, manages, and modifies the control measures to make continuous improvements to the program. Effective management of storm water is important to Forest Hill because it can revitalize surface waters, improve quality of life, and create places where businesses and residents want to live work, play and stay.

The City of Forest Hill has actively participated in storm water quality improvements for many years and will continue on that path. **Click here for more information.**

City of Forest Hill Phase II MS4 Year 1 Annual Report 2019

To file a public complaint, you can:

1. Call the City of Forest Hill Public Works Department at 817-531-5700; or
2. Send an email to Public Works Superintendent Roberto Duenes at rduenes@foresthilltx.org. Include your full name, address, contact telephone number and/or email, and provide a brief explanation of the issue you observe.
3. Once the message is received, it will be recorded by the city. The issue will be investigated by all applicable department(s) and resolved. A follow-up telephone call will be made to the citizen who reported the issue.

2018 Consumer Confidence Report

2019 Consumer Confidence Report

2020 Consumer Confidence Report

2021 Consumer Confidence Report

2022 Consumer Confidence Report

City of Forest Hill 2021 Water Quality Report

City of Forest Hill 2022 Water Quality Report

Phase II MS4 Annual Report

Websites with helpful information about fats, oils and grease in the kitchen; recycling, and stormwater :
Defend Your Drain – www.defendyourdrainsnorthtexas.com

NCTCOG Educational Task Force – www.nctcog.org

Take Care of Texas – www.takecareoftexas.org

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☒ Unauthorized Discharge ☐ Reportable Effluent Violation ☐ Other

General Information

Entity Name: CITY OF FOREST HILL **Telephone No:** (817) 531-5700

☐ Permittee ☒ Subscriber

TCEQ Region: 4 **County:** TARRANT ***Permit Number:** RN102943875

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

SEWER BACKUP/MANHOLE OVERFLOW OF APPROX. 1500 GALLONS

Cause of Noncompliance: ROOTS IN SEWER LINE

Duration: **Start Date and Time:** 12/7/2023 at 11:15am
End Date and Time: 12/7/2023 at 11:40am **Or** **Date Expected to be Corrected:**

Potential Danger to Human Health and Safety or the Environment:

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☐ Yes ☒ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: RAN/FLUSHED WITH WATER TO DILUTE SEWAGE.

Actions Taken to Correct the Problem and Prevent Recurrence: CLEARED BACKUP OF ROOTS/BLOCKAGE.

Verification Information

Information Reported By (Name/Title): ROBERTO DUENES, PUBLIC WORKS DIRECTOR

Date Reported: 12/19/2023 (original report – 12/7/2023)
Signature: _____

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

*** If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.**

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Spill Control and Response***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Annually review written spill control procedures and make any necessary revisions.

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 City continues to use the existing spill control procedures when addressing illicit discharges. The City reviewed the current spill control procedures and deemed no changes 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.

   It is important for the staff to be informed on how to respond to a spill or an illicit discharge and keep the methods for responding consistent.

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:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Ordinance for Illicit Discharge Detection and Elimination***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing (or begin new) operations under the ordinance.

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 City continues to enforce the Illicit Discharge Ordinance. As part of the ordinance, the City inspect and investigate potential illicit discharges. This year the City of Forest Hill did not receive any reports of illicit discharges.

   (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 illicit discharge ordinance allows the City 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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Sanitary Sewer Inspections and Maintenance***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Treat the City's sanitary sewer system at least once annually with a degreasing product to prevent sanitary sewer overflows. Require contractors to provide CCTV inspections of all new sanitary sewer lines.

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 City routinely treats the City's sanitary sewer system quarterly. High priority areas, such as, lift stations are treated daily. In 2023, Forest Hill conducted regular chemical preventative maintenance for 44 manholes and grease traps inspections at local businesses.

   (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.

   Routine maintenance of the sanitary sewer system prevents sanitary sewer overflows during heavy rain events thus reducing the potential for the discharge of pollutants 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 ☒

CHEMICAL PREVENTATIVE MAINTENANCE

2023

LOCATION	DATE TREATED	GALLONS OF CHEMICALS USED	INITIALS	NOTES
3100 Forest Hill Circle	3/7/2023	1	FG	more grease than usual
4016 Duncan Dr.	3/7/2023	1	FG	
5725 Frisco Ave.	3/7/2023	1	FG	
3600 Carriage Hill Dr.	3/7/2023	1	FG	
6225 Nell St.	3/7/2023	1	FG	
6001 Crawford Ln.	3/7/2023	1	FG	
5720 Crawford Ln.	5/24/2023	1	FG	
6700 Trailwood Dr.	7/13/2023	1	FG	
6001 Nell St.	7/13/2023	1	FG	
6521 Shady Hill Dr.	7/13/2023	1	FG	
3200 Valley Forge Trail	5/24/2023	1	FG	
6432 Evonshire Dr.	5/24/2023	1	FG	
3812 Truett Street	5/24/2023	1	FG	
7300 Woodbridge	5/24/2023	1	FG	
6200 Wichita Street	5/24/2023	1	FG	
5800 Wichita Street	5/24/2023	1	FG	
4002 Mansfield Hwy.	10/18/2023	1	FG	
5100 Queen Ann Dr.	10/18/2023	1	FG	
7110 Stonewall	3/7/2023	1	FG	
6361 Melinda Dr.	10/18/2023	1	FG	
4800 Marshall St.	10/18/2023	1	FG	
4748 Alandale Dr.	7/13/2023	1	FG	
6800 Alma St.	7/13/2023	1	FG	
4524 Parkwood Dr.	7/13/2023	1	FG	
7324 Stonewall	7/13/2023	1	FG	
3233 Appomattox	7/13/2023	1	FG	
Leonard St./Wanda	10/18/2023	1	FG	
3328 Centennial Rd.	10/18/2023	1	FG	
3276 Centennial Rd.	10/18/2023	1	FG	
3225 Oak Timber Dr	3/7/2023	1	FG	
3317 Oak Timber Dr.	3/7/2023	1	FG	
3350 Railfence Rd.	3/7/2023	1	FG	
3248 Shamrock Ln.	10/18/2023	1	FG	
3300 Grady St.	10/18/2023	1	FG	
3140 Heritage Lane	10/18/2023	1	FG	
7333 Tradition	10/18/2023	1	FG	
3848 Grady St.	10/18/2023	1	FG	
7314 Forest Hill Dr.	10/18/2023	1	FG	
3729 Cobblestone	10/18/2023	1	FG	
6500 Forest Hill Drive	3/7/2023	1	FG	
4312 Forest Hill Circle	3/7/2023	1	FG	
5900 Hartman Road	3/7/2023	1	FG	
6120 Wanda Lane	3/7/2023	1	FG	
6220 Anglin Drive	3/7/2023	1	FG	
	TOTAL	44		

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Illicit Discharge Detection and Elimination**
BMP Title:	***Illicit Discharge Inspections***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Annually document number of inspections performed, identified sources of illicit discharges, and corrective actions taken. Continue inspection program. If changes are made to the ordinance, ensure that training of the new requirements and inspection procedures is conducted.

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 City did not receive any reports on illicit discharges or detected any during routine inspections. Forest Hill actively inspects inlets, treats manholes, and maintain drainage ditch for preventative measures against stormwater pollution.

   (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.

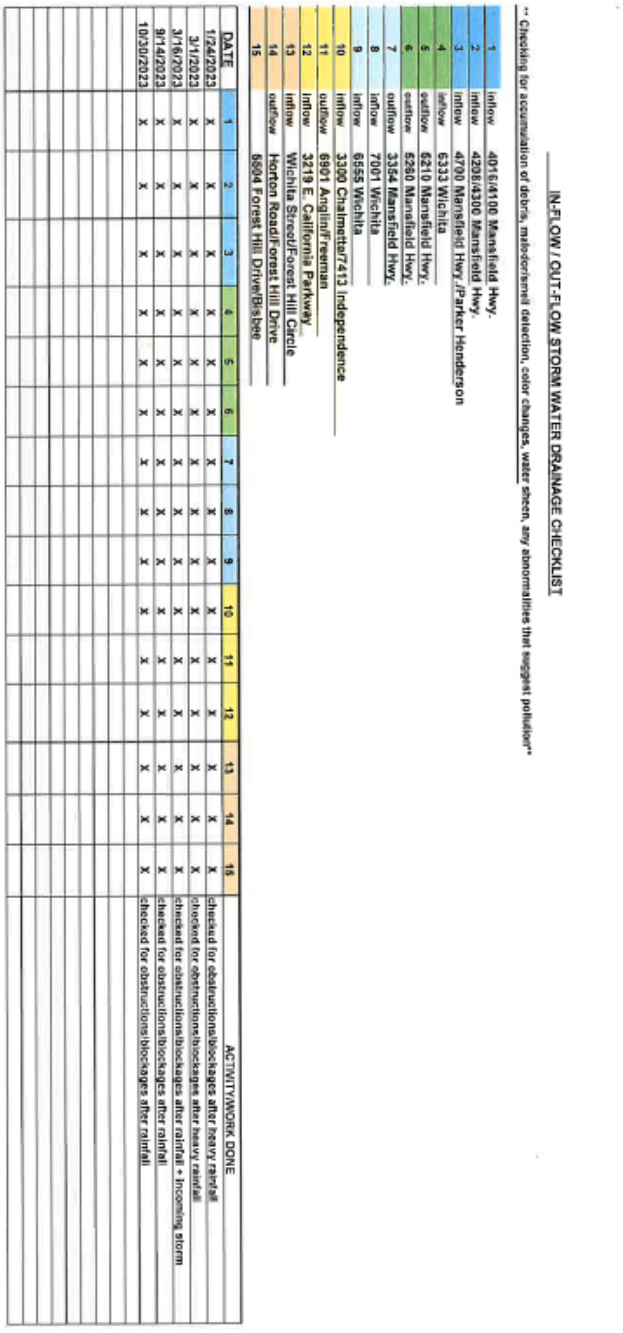
   It is important to conduct illicit discharge inspections to prevent non-stormwater discharges, and illegal dumping, and take actions of enforcement on any issues that may arise.

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 ☒

Inflow/Outflow Stormwater Drainage Checklist



IN-FLOW / OUT-FLOW STORM WATER DRAINAGE CHECKLIST

** Checking for accumulation of debris, mold/chemical detection, color changes, water sheen, any abnormalities that suggest pollution**

1	inflow	4016/4100 Mansfield Hwy;
2	inflow	4208/4300 Mansfield Hwy;
3	inflow	4700 Mansfield Hwy./Parker Henderson
4	inflow	6333 Wichita
5	outflow	6210 Mansfield Hwy;
6	outflow	5260 Mansfield Hwy;
7	outflow	3354 Mansfield Hwy;
8	inflow	7001 Wichita
9	inflow	6555 Wichita
10	inflow	3300 Chalmette/7413 Independence
11	outflow	6901 Anglin/Freeman
12	inflow	3219 E. California Parkway
13	inflow	Wichita Street/Forest Hill Circle
14	outflow	Horton Road/Forest Hill Drive
15		6604 Forest Hill Drive/Bisbee

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	ACTIVITY/WORK DONE
1/24/2023	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	checked for obstructions/blockages after heavy rainfall
3/1/2023	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	checked for obstructions/blockages after heavy rainfall
3/16/2023	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	checked for obstructions/blockages after rainfall + incoming storm
9/14/2023	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	checked for obstructions/blockages after rainfall
10/30/2023	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	checked for obstructions/blockages after rainfall

Storm Drain Inlet Maintenance/Inspection

STORM DRAIN INLET MAINTENANCE/INSPECT

ZONE 1

LOCATION	DATE COMPLETED
5504 Forest Hill Drive	1/12/2023
6432 Forest Hill Drive	1/12/2023
6500 Forest Hill Drive	1/12/2023
3300 Horton Road	1/12/2023
5601 Burleson Street	1/12/2023
3200 George Avenue	1/12/2023
3200 Devalcourt Avenue	1/12/2023
3200 Shepard Street	1/12/2023
3200 Orchard Street	1/12/2023
3200 Grady Street	1/12/2023
3200 Maryann Drive	1/12/2023
3200 Shamrock Lane	1/12/2023
3232 Centennial Road	1/12/2023
3258 Centennial Road	1/12/2023
3268 Centennial Road	1/12/2023
6500 Centennial Road	1/12/2023
6500 Guilford Street	1/12/2023
3400 Alhambra Drive	1/12/2023
3500 Alhambra Drive	1/12/2023
6328 Banbury Drive	1/12/2023
6412 Banbury Drive	1/12/2023
6420 Banbury Drive	1/12/2023
6400 Friar Court	1/12/2023
6417 Duer Drive	1/12/2023
3513 Oak Haven Drive	1/12/2023
3601 Oak Haven Drive	1/12/2023
3700 Cardinal Ridge	1/12/2023
4601 Marshall Street	1/12/2023
5306 Wichita Street	1/12/2023
5327 Wichita Street	1/12/2023
5405 Wichita Street	1/26/2023
5609 Wichita Street	1/26/2023
5801 Wichita Street	1/26/2023
5817 Wichita Street	1/26/2023
5901 Wichita Street	1/26/2023
5913 Wichita Street	1/26/2023
6000 Wichita Street	1/26/2023
6109 Wichita Street	1/26/2023
6119 Wichita Street	1/26/2023
6215 Wichita Street	1/26/2023
6225 Wichita Street	1/26/2023
6325 Wichita Street	1/26/2023
6549 Wichita Street	1/26/2023

STORM DRAIN INLET MAINTENANCE

ZONE 2

LOCATION	DATE COMPLETED
4829 Melinda Drive	1/26/2023
4829 Dorsey Street	1/26/2023
4749 Dorsey Street	3/23/2023
4744 Alandale Drive	3/23/2023
4749 Alandale Drive	3/23/2023
4801 Alandale Drive	3/23/2023
4801 Marshall Street	3/23/2023
6301 Regal Road	3/23/2023
6401 Hartman Road	3/23/2023
4900 California Parkway	3/23/2023
3900 California Parkway	3/23/2023

STORM DRAIN INLET MAINTENANCE

ZONE 3

LOCATION	DATE COMPLETED
4716 Parkwood Drive	4/20/2023
6736 Trailwood Drive	4/20/2023
4545 Parkwood Drive	4/20/2023
4524 Parkwood Drive	4/20/2023
6849 Twin Oaks Drive	4/20/2023
6821 Wagonet Road	4/20/2023
3632 Carriage Hill Drive	4/20/2023
3516 Carriage Hill Drive	4/20/2023
6732 Plantation Road	4/20/2023
6950 Cobblestone Drive	4/20/2023
3621 Cobblestone Drive	4/20/2023
3625 Cobblestone Drive	4/20/2023
3700 Cobblestone Drive	4/20/2023
3729 Cobblestone Drive	4/20/2023
3732 Park Avenue	4/20/2023
3737 Caladium Lane	4/20/2023
3752 Park Avenue	4/20/2023
7421 Park Avenue	4/20/2023
7425 Park Avenue	4/20/2023
7432 Rose Crest Blvd.	4/20/2023
7440 Rose Crest Blvd.	4/24/2023
3505 Nantucket Drive	4/24/2023
3600 Nantucket Drive	4/24/2023
7336 Nantucket Drive	4/24/2023
7508 Rose Crest Blvd.	4/24/2023
3700 Dutch Iris Lane	4/24/2023
3744 Woodbridge Drive	4/24/2023
7300 Falmouth Drive	4/24/2023
3432 Woodbridge Drive	4/24/2023
7300 Folkstone Drive	4/24/2023
7301 Meadows Drive	4/24/2023
3300 California Parkway	4/24/2023
3308 California Parkway	4/24/2023
3225 California Parkway	4/24/2023

STORM DRAIN INLET MAINTENANCE

ZONE 4

LOCATION	DATE COMPLETED
7329 Stonewall Road	6/14/2023
7324 Stonewall Road	6/14/2023
7312 Stonewall Road	6/14/2023
7220 Stonewall Road	6/14/2023
7208 Stonewall Road	6/14/2023
7112 Stonewall Road	6/14/2023
7216 Autumn Run Drive	6/14/2023
3121 Autumn Run Drive	6/14/2023
3045 Autumn Run Drive	6/14/2023
3000 Autumn Run Drive	6/14/2023
7201 Autumn Moon Drive	6/14/2023
7201 Autumn Glen Drive	6/14/2023
7201 Misty Dawn Drive	6/14/2023
3141 Heritage Lane	6/15/2023
3136 Heritage Lane	6/15/2023
3000 Heritage Lane	6/15/2023
3144 Ronay Drive	6/15/2023
3249 Valley Forge Trail	6/15/2023
3072 Valley Forge Trail	6/15/2023
3024 Valley Forge Trail	6/15/2023
6952 Windward Way	6/15/2023
6956 Stephens Hill Road	6/15/2023
3313 Jamestown Drive	6/15/2023
3317 Old Hickory Trail	6/15/2023
6901 Forest Hill Drive	6/15/2023
6700 Forest Hill Drive	6/15/2023
3320 Forest Hill Circle	6/15/2023
3201 Forest Hill Circle	6/15/2023
3231 Forest Hill Circle	6/15/2023
3227 Forest Hill Circle	6/15/2023
3100 Forest Hill Circle	6/28/2023
3000 Forest Hill Circle	6/28/2023
3204 Park Run	6/28/2023

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Ordinance for Construction Site Stormwater Runoff Control***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing (or begin new) operations under new or revised ordinance. Include education regarding ordinance in educational materials to the public business.

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 & Sediment Control ordinance continues to be enforced. The City reviewed the ordinance and deemed no changes 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.

   It is important for the City to be able to enfroce 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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Site Plan Review Process***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Document number of plans reviewed each year. Implement changes to site plan review process.

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 City has administered the construction plan review process for civil plans for 4 new development projects.

   (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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Construction Site Stormwater Runoff Control**
BMP Title:	***Construction Site Inspections and Enforcement***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Document number of inspections performed, issues addressed, and corrective actions taken. If changes are made to the ordinance ensure that training of the new requirements and inspection procedures is conducted.

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 were 2 active construction site larger than 1 acre, both of which were commercial construction and included in the attached inspection reports. The City conducted 2,048 construction inspections for commercial and residential construction. Of those inspections, 125 were related to soil disturbance and inspectors were trained to identify pollution potential and notify owners of potential violations and necessary corrective actions. Construction inspections are available at the City offices.

   (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 ☒

CITY OF FOREST HILL
INSPECTION RECORDS
SORTED BY LAND DISTURBANCE TYPE

Permit #	Permit Date	Applicant	Column1	Applicant Address	City, State, Zip	Permit Expiration	Permit Date2	Inspection Type	Description	Inspection Status
32916	12/15/2022	Texas Pc Builders		15922 Eldorado Pkwy	Frisco TX	12/15/2023	10/3/2023	COM CONCRETE/ASPHALT	12-3pm final on concrete	PASSED
32916	12/15/2022	Texas Pc Builders		15922 Eldorado Pkwy	Frisco TX	12/15/2023	10/3/2023	COM CONCRETE/ASPHALT	12-3pm last pour	PASSED
33308	2/7/2023	B.C. SALES AND MKTG		4101 W. GREEN OAKS	ARLINGTON TX	8/7/2023	6/7/2023	COM CONCRETE/ASPHALT	12-3 F INAL PAVING	PASSED
34489	5/30/2023	JAMESTOWN CONS.		14009 OAK BARK dR.		11/30/2023	6/5/2023	COM CONCRETE/ASPHALT	stake out insp call 30 mins prior 817-797-7985	PASSED
33308	2/7/2023	B.C. SALES AND MKTG		4101 W. GREEN OAKS	ARLINGTON TX	8/7/2023	4/25/2023	COM CONCRETE/ASPHALT	pre pour 12-3	PASSED
34456	5/24/2023	REDCLOUD MANAGEMENT		2114 WARNER RD	FORT WORTH, TX 76110	11/24/2024	6/13/2023	COM DEMO	12-3pm demo	Completed
34107	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/5/2023	8/30/2023	COM DRIVE APPROACH	12-3	PASSED
34601	6/15/2023	TEx Turf Sod LLC		7701 Davis BLvd	North Richland Hills, TX 76182	12/15/2023	7/31/2023	COM IRRIGATION	12PM TO 3PM	PASSED
32792	11/16/2022	LV Landscaping		1436 Hendricks ave	Dallas Tx 75216	5/16/2023	5/25/2023	COM IRRIGATION	12-3	PASSED
29024	8/2/2021	Buffalo Builders LLC-GOREE ARCHITECTS		806 Pensylvania	Kennedale Texas 76060	11/4/2021	2/13/2023	COM IRRIGATION	City inspection of detention pond	FAILED
33370	2/15/2023	HUGO RODRIGUEZ		800 PARK		8/15/2023	8/9/2023	COM PARKING LOT	12-3	PASSED
34003	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/20/2023	11/27/2023	COM PIER	12-3PM PIER FOR SIGN	PASSED
35260	9/28/2023	Willow Creek Signs		2633 Blue Mound Rd	Haslet, Tx76052	3/28/2024	11/20/2023	COM PIER	12-3	Scheduled
34909	8/7/2023	RCG Group Inc		5500 E loop 820 S		2/7/2024	10/30/2023	COM PIER	piers for canopy 12-3	PASSED
34372	5/25/2023	W Two Plus LLC		444 Kennedale Pkwy	Kennedale, TX 76060	5/25/2023	10/12/2023	COM PIER	12-3	FAILED
34372	5/25/2023	W Two Plus LLC		444 Kennedale Pkwy	Kennedale, TX 76060	5/25/2023	7/14/2023	COM PIER	12-3 please make first inspection.	PASSED
34372	5/25/2023	W Two Plus LLC		444 Kennedale Pkwy	Kennedale, TX 76060	5/25/2023	7/12/2023	COM PIER		PASSED
35205	9/21/2023	MANUEL MONTES		4620 LEONARD ST	FOREST HILL TX	3/21/2024	12/1/2023	COM PLUMBING ROUGH	12-3	PASSED
35122	9/14/2023	Farias Concrete		P O Box 60592	Fort Worth, Tx 76115	3/14/2024	11/13/2023	COM PLUMBING ROUGH	12-3pm converting storage to office call reyna before 817-913-8916	PASSED
33157	1/12/2023	IBC CONSTRUCTION		555 REPUBLIC DR	PLANO TX	7/12/2023	11/1/2023	COM PLUMBING ROUGH	12-3pm	FAILED
33157	1/12/2023	IBC CONSTRUCTION		555 REPUBLIC DR	PLANO TX	7/12/2023	10/5/2023	COM PLUMBING ROUGH	12-3pm	FAILED
34107	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/5/2023	9/29/2023	COM PLUMBING ROUGH	12-3pm	PASSED
34807	7/19/2023	G + G Construction LLC		2101 Ruea St	Grand Prairie, TX 75050	1/19/2024	7/24/2023	COM PLUMBING ROUGH	12-3	PASSED
32916	12/15/2022	Texas Pc Builders		15922 Eldorado Pkwy	Frisco TX	12/15/2023	7/19/2023	COM PLUMBING ROUGH	12-3	PASSED
34607	6/15/2023	REDCLOUD MANAGEMENT		2114 WARNER RD	FORT WORTH, TX 76110	12/15/2023	6/20/2023	COM PLUMBING ROUGH	12-3PM FOR NEW WAREHOUSE	PASSED
33157	1/12/2023	IBC CONSTRUCTION		555 REPUBLIC DR	PLANO TX	7/12/2023	4/26/2023	COM PLUMBING ROUGH	12-3pm underground plumbing.	PASSED
34003	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/20/2023	6/22/2023	COM UNDER GROUND	service underground	PASSED
34003	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/20/2023	6/1/2023	COM UNDER GROUND	12-3pm CODE #1836	PASSED
34003	4/20/2023	Silverton Construction		111 Boland St ste 202	Ft worth, TX	10/20/2023	5/31/2023	COM UNDER GROUND	12-3	FAILED
31803	7/7/2022	Frank Dale construction		250 Bank St	Southlake TX	1/7/2023	1/18/2023	COM UNDER GROUND	12-3pm underground gas inspection on private side.	PASSED
32598	11/16/2022	Epic Electrical Contractors		905 Scenic Dr		5/16/2023	1/5/2023	COM UNDER GROUND	12-3pm call master electrician craig 8177365493 before arriving	PASSED
34072	4/18/2023	SOLOMAN MADRIGAL		1122 HAWTHORNE AVE	JANETH.MADRIGAL@YAHOO.COM	10/18/2023	12/1/2023	RES DRIVE APPROACH	12-3PM	PASSED
35504	10/19/2023	Eduardo Hinojosa		6337 Hartman Rd	Forest Hill, Tx 76119	4/19/2024	11/28/2023	RES DRIVE APPROACH	12-3PM	PASSED
35659	11/14/2023	Silva Plumbing inc		6337 Hartman Rd	Forest Hill, Tx 76119	4/23/2024	11/28/2023	RES DRIVE APPROACH	12-3PM	PASSED
34816	8/30/2023	Paulo Orta		2333 Snowdon Dr	Arlignton,TX 76018	3/1/2024	10/5/2023	RES DRIVE APPROACH	12-3PM FINAL FOR DRIVE APPROACH	PASSED
34816	8/30/2023	Paulo Orta		2333 Snowdon Dr	Arlignton,TX 76018	3/1/2024	9/18/2023	RES DRIVE APPROACH	12-3	PASSED
34799	7/18/2023	EDUARDO HINOJOSA		6337 HARTMAN RD	FOREST HILL TX	1/17/2024	9/8/2023	RES DRIVE APPROACH	12-3	PASSED

CITY OF FOREST HILL
INSPECTION RECORDS
SORTED BY LAND DISTURBANCE TYPE

32936	1/17/2023	Tomas Aguirre	3221 George Ave	Forest Hill Tx 76119	7/17/2023	6/13/2023	RES DRIVE APPROACH	12-3pm form for the driveway	PASSED
34458	5/24/2023	MARWA CONSTRUCTION LLC	3909 PANAMA	FORET HILL,TX 76119	11/24/2023	6/6/2023	RES DRIVE APPROACH	12-3pm	PASSED
34440	5/22/2023	Marwa Construction LLC	3909 Panama St	Forest Hill, TX 76119	11/22/2023	5/31/2023	RES DRIVE APPROACH	12-3pm	FAILED
32730	11/8/2022	UP DFW Properties LLC	3812 Duncan	Forest Hill Tx 76119	5/8/2023	5/19/2023	RES DRIVE APPROACH	12-3	PASSED
33543	3/6/2023	MITZY ROLON	6320 WANDA LN	FOREST HILL TX 76119	9/6/2023	5/17/2023	RES DRIVE APPROACH	12-3	PASSED
31929	7/12/2022	Eduardo Hinojosa	6337 Horton Rd	Forest Hill Tx	1/12/2023	4/20/2023	RES DRIVE APPROACH	12-3pm	PASSED
32027	7/22/2022	C.Serrano Construction	9 oak creek dr # e	Kaufman, Tx 75142	7/27/2023	3/9/2023	RES DRIVE APPROACH	12-3PM DRIVE WAY	PASSED
35205	9/21/2023	MANUEL MONTES	4620 LEONARD ST	FOREST HILL TX	3/21/2024	9/25/2023	RES FORM BOARD SURVEY	12-3PM	PASSED
34354	5/9/2023	Abel Torres Investments	5749 Macrae St	Haltom City, Tx 76148	11/9/2023	8/4/2023	RES FORM BOARD SURVEY	12-3PM	PASSED
34576	6/12/2023	Saldivar's Builders	1116 Kennedale Sublett rd	Kennedale, TX 76060	12/12/2023	7/27/2023	RES FORM BOARD SURVEY	12-3	PASSED
34799	7/18/2023	EDUARDO HINOJOSA	6337 HARTMAN RD	FOREST HILL TX	1/17/2024	7/20/2023	RES FORM BOARD SURVEY	12-3	PASSED
34354	5/9/2023	Abel Torres Investments	5749 Macrae St	Haltom City, Tx 76148	11/9/2023	7/19/2023	RES FORM BOARD SURVEY	12-3	FAILED
34072	4/18/2023	SOLOMAN MADRIGAL	1122 HAWTHORNE AVE	JANETH.MADRIGAL @YAHOO.COM	10/18/2023	5/3/2023	RES FORM BOARD SURVEY	12-3pm OWNER REQUESTING YOU GO BY AND SEE FORMS	PASSED
33743	3/20/2023	Manuel Montes	4620 LEONARD ST	FOREST HILL	9/20/2023	3/27/2023	RES FORM BOARD SURVEY	12-3PM	FAILED
32936	1/17/2023	Tomas Aguirre	3221 George Ave	Forest Hill Tx 76119	7/17/2023	1/26/2023	RES FORM BOARD SURVEY	12-3PM NEW BUILD CONSTRUCTION HOME	PASSED
32655	10/24/2022	JOSE NUNEZ	4258 LARSON LN	FORT WORTH TX 76115	8/11/2023	1/12/2023	RES FORM BOARD SURVEY	12-3PM NEW HOUSE	PASSED
35513	10/20/2023	Barron Services LLC	8309 Burma Dr	Fort Worth, Tx 76131	4/20/2024	12/22/2023	RES FOUNDATION	12-3pm	PASSED
35205	9/21/2023	MANUEL MONTES	4620 LEONARD ST	FOREST HILL TX	3/21/2024	11/6/2023	RES FOUNDATION	12-3 please make first inspection..	PASSED
34484	5/26/2023	CONSTRUCTION SERVICE COMPANY	PO BOX #562	ITASCA TX 76055	11/26/2023	8/30/2023	RES FOUNDATION	12-3	FAILED
34642	6/21/2023	Tarrant Equality LLC	PO BOX 19372	FORT WORTH	12/21/2023	8/18/2023	RES FOUNDATION	12-3pm foundation	PASSED
34576	6/12/2023	Saldivar's Builders	1116 Kennedale Sublett rd	Kennedale, TX 76060	12/12/2023	7/28/2023	RES FOUNDATION	12-3	PASSED
34576	6/12/2023	Saldivar's Builders	1116 Kennedale Sublett rd	Kennedale, TX 76060	12/12/2023	7/27/2023	RES FOUNDATION	12-3	FAILED
34072	4/18/2023	SOLOMAN MADRIGAL	1122 HAWTHORNE AVE	JANETH.MADRIGAL @YAHOO.COM	10/18/2023	6/12/2023	RES FOUNDATION	12-3pm	PASSED
33543	3/6/2023	MITZY ROLON	6320 WANDA LN	FOREST HILL TX 76119	9/6/2023	3/17/2023	RES FOUNDATION	12-3 foundation pre pour	PASSED
32655	10/24/2022	JOSE NUNEZ	4258 LARSON LN	FORT WORTH TX 76115	8/11/2023	3/13/2023	RES FOUNDATION	12-3PM CALL 6825582409 JOSE 30 MIN PRIOR TO ARRIVAL	PASSED
33233	1/30/2023	Gabino Emilio	3513 west Ln		7/30/2023	2/21/2023	RES FOUNDATION	12-3PM PRE POUR	PASSED
32936	1/17/2023	Tomas Aguirre	3221 George Ave	Forest Hill Tx 76119	7/17/2023	2/21/2023	RES FOUNDATION	12-3pm	PASSED
34354	5/9/2023	Abel Torres Investments	5749 Macrae St	Haltom City, Tx 76148	11/9/2023	12/14/2023	RES PLUMBING ROUGH	12-3	FAILED
35513	10/20/2023	Barron Services LLC	8309 Burma Dr	Fort Worth, Tx 76131	4/20/2024	12/8/2023	RES PLUMBING ROUGH	12-3pm	PASSED
34706	6/30/2023	Alavi Investments LLC	3959 E Lancaster AVe	Ft Worth, TX 76103	12/30/2023	12/6/2023	RES PLUMBING ROUGH	12-3pm	PASSED
35659	11/14/2023	Silva Plumbing inc	6337 Hartman Rd	Forest Hill, Tx 76119	4/23/2024	11/28/2023	RES PLUMBING ROUGH	12-3PM	PASSED
34354	5/9/2023	Abel Torres Investments	5749 Macrae St	Haltom City, Tx 76148	11/9/2023	11/16/2023	RES PLUMBING ROUGH	12-3pm	FAILED
35531	10/23/2023	Eduardo Hinojosa	6337 Hartman Rd	Forest Hill, Tx 76119	4/23/2024	11/8/2023	RES PLUMBING ROUGH	PRE POUR	PASSED
34484	5/26/2023	CONSTRUCTION SERVICE COMPANY	PO BOX #562	ITASCA TX 76055	11/26/2023	11/2/2023	RES PLUMBING ROUGH	12-3	FAILED
35525	10/23/2023	Service Master	1630 Euless BLVD		4/23/2024	11/1/2023	RES PLUMBING ROUGH	12-3	FAILED
35504	10/19/2023	Eduardo Hinojosa	6337 Hartman Rd	Forest Hill, Tx 76119	4/19/2024	10/20/2023	RES PLUMBING ROUGH	12-3pm	PASSED
35205	9/21/2023	MANUEL MONTES	4620 LEONARD ST	FOREST HILL TX	3/21/2024	10/19/2023	RES PLUMBING ROUGH	12-3pm new build	PASSED
34642	6/21/2023	Tarrant Equality LLC	PO BOX 19372	FORT WORTH	12/21/2023	10/3/2023	RES PLUMBING ROUGH	12-3pm	PASSED
33234	1/24/2023	ISMAEL OTERO	202 HAMIL ST	MANSFIELD,TX 76063	7/24/2023	9/25/2023	RES PLUMBING ROUGH	12-3	PASSED
32656	10/25/2022	Triple K Holdings	2909 Turner Warnell Rd	Arlington tx 76001	4/25/2023	9/18/2023	RES PLUMBING ROUGH	12-3	PASSED

34484	5/26/2023	CONSTRUCTION SERVICE COMPANY	PO BOX #562	ITASCA TX 76055	11/26/2023	9/7/2023	RES PLUMBING ROUGH	12-3	PASSED
34484	5/26/2023	CONSTRUCTION SERVICE COMPANY	PO BOX #562	ITASCA TX 76055	11/26/2023	8/30/2023	RES PLUMBING ROUGH	12-3	FAILED
34576	6/12/2023	Saldivar's Builders	1116 Kennedale Sublett rd	Kennedale, TX 76060	12/12/2023	8/30/2023	RES PLUMBING ROUGH	12-3pm with meps	Scheduled
32656	10/25/2022	Triple K Holdings	2909 Turner Warnell Rd	Arlington tx 76001	4/25/2023	8/15/2023	RES PLUMBING ROUGH	12-3	FAILED
34354	5/9/2023	Abel Torres Investments	5749 Macrae St	Haltom City, Tx 76148	11/9/2023	8/15/2023	RES PLUMBING ROUGH	12-3	PASSED
34642	6/21/2023	Tarrant Equality LLC	PO BOX 19372	FORT WORTH	12/21/2023	8/9/2023	RES PLUMBING ROUGH	12-3	PASSED
34072	4/18/2023	SOLOMAN MADRIGAL	1122 HAWTHORNE AVE	JANETH.MADRIGAL @YAHOO.COM	10/18/2023	7/26/2023	RES PLUMBING ROUGH	12-3pm	FAILED
34799	7/18/2023	EDUARDO HINOJOSA	6337 HARTMAN RD	FOREST HILL TX	1/17/2024	7/20/2023	RES PLUMBING ROUGH	12-3	PASSED
34072	4/18/2023	SOLOMAN MADRIGAL	1122 HAWTHORNE AVE	JANETH.MADRIGAL @YAHOO.COM	10/18/2023	7/19/2023	RES PLUMBING ROUGH	12-3pm framing and all meps	FAILED
34576	6/12/2023	Saldivar's Builders	1116 Kennedale Sublett rd	Kennedale, TX 76060	12/12/2023	7/18/2023	RES PLUMBING ROUGH	12-3PM CALL 30 MIN PRIOR TO ARRIVAL 6822183414	PASSED
32655	10/24/2022	JOSE NUNEZ	4258 LARSON LN	FORT WORTH TX 76115	8/11/2023	7/13/2023	RES PLUMBING ROUGH		Scheduled
32655	10/24/2022	JOSE NUNEZ	4258 LARSON LN	FORT WORTH TX 76115	8/11/2023	6/14/2023	RES PLUMBING ROUGH	12-3	FAILED
33234	1/24/2023	ISMAEL OTERO	202 HAMIL ST	MANSFIELD,TX 76063	7/24/2023	6/2/2023	RES PLUMBING ROUGH	12-3PM	FAILED
33969	4/4/2023	CHAMPION HOME REMODELING & DESIGN	2210 WREN LANE	LEWISVILLE TX 75077	10/4/2023	4/27/2023	RES PLUMBING ROUGH	12-3pm lock box 1029	PASSED
33930	3/30/2023	Martin Castillo	3320 Cardinal Ridge	Forest HIll, TX 76119	9/30/2023	4/25/2023	RES PLUMBING ROUGH	12-3	PASSED
34065	4/13/2023	FOREST SERVICES	220 CRYSTAL CT	HEATH TX 75032	10/13/2023	4/24/2023	RES PLUMBING ROUGH	12-3pm	PASSED
33233	1/30/2023	Gabino Emilio	3513 west Ln		7/30/2023	4/20/2023	RES PLUMBING ROUGH	12-3 please 30 mins pirior 817-2665043	FAILED
34065	4/13/2023	FOREST SERVICES	220 CRYSTAL CT	HEATH TX 75032	10/13/2023	4/19/2023	RES PLUMBING ROUGH	12-3pm	PASSED
33559	3/7/2023	JOSE GOMEZ	3721 COBBLESTONE	FOREST HILL TX 76140	9/7/2023	4/17/2023	RES PLUMBING ROUGH	12-3pm	PASSED
33559	3/7/2023	JOSE GOMEZ	3721 COBBLESTONE	FOREST HILL TX 76140	9/7/2023	4/12/2023	RES PLUMBING ROUGH	12-3pm	FAILED
33723	3/17/2023	Double D Contracting	p o box 24281	Ft Worth TX 76124	9/17/2023	4/3/2023	RES PLUMBING ROUGH	12-3 plumbing sewer line	PASSED
33256	1/26/2023	Curly's Plumbing	1002 E 2nd st	Cleburne TX 76031	7/26/2023	3/24/2023	RES PLUMBING ROUGH	12-3pm	PASSED
32936	1/17/2023	Tomas Aguirre	3221 George Ave	Forest Hill Tx 76119	7/17/2023	3/22/2023	RES PLUMBING ROUGH	12-3pm with all mep's	PASSED
33697	3/16/2023	FOREST SERVICES	220 CRYSTAL CT	HEATH,TX 75032	9/16/2023	3/21/2023	RES PLUMBING ROUGH	12-3 lockbox 1966	PASSED
33543	3/6/2023	MITZY ROLON	6320 WANDA LN	FOREST HILL TX 76119	9/6/2023	3/16/2023	RES PLUMBING ROUGH	12-3	PASSED
33365	2/14/2023	ROMAN ROSALES	1214 S AKARD ST		8/14/2023	3/14/2023	RES PLUMBING ROUGH	12-3pm lockbox 1010	PASSED
33233	1/30/2023	Gabino Emilio	3513 west Ln		7/30/2023	2/21/2023	RES PLUMBING ROUGH	12-3PM UNDERGROUND PLUMBING	PASSED
32655	10/24/2022	JOSE NUNEZ	4258 LARSON LN	FORT WORTH TX 76115	8/11/2023	2/17/2023	RES PLUMBING ROUGH	12-3pm	PASSED
32936	1/17/2023	Tomas Aguirre	3221 George Ave	Forest Hill Tx 76119	7/17/2023	2/16/2023	RES PLUMBING ROUGH	12-3pm new build	PASSED
32693	11/1/2022	Gustavo Martinez	4810 Philp Ave	Dallas TX 75223	5/1/2023	2/16/2023	RES PLUMBING ROUGH	12-3pm	PASSED
32693	11/1/2022	Gustavo Martinez	4810 Philp Ave	Dallas TX 75223	5/1/2023	2/15/2023	RES PLUMBING ROUGH	12-3	FAILED
32693	11/1/2022	Gustavo Martinez	4810 Philp Ave	Dallas TX 75223	5/1/2023	2/9/2023	RES PLUMBING ROUGH	12-3pm	FAILED
33082	12/27/2022	HERNAN HERNAN	918 CHELMERS		6/27/2023	2/6/2023	RES PLUMBING ROUGH	12-3pm	PASSED
33082	12/27/2022	HERNAN HERNAN	918 CHELMERS		6/27/2023	1/24/2023	RES PLUMBING ROUGH	12-3	FAILED
32876	11/29/2022	MARTINEZ-TRUJILLO PROPERTIES	1111 WEST MAYFIELD RD	ARLINGTON TX	5/29/2023	1/17/2023	RES PLUMBING ROUGH	12-3PM FULL REMODEL	FAILED
32730	11/8/2022	UP DFW Properties LLC	3812 Duncan	Forest Hill Tx 76119	5/8/2023	1/13/2023	RES PLUMBING ROUGH	12-3PM	PASSED
32730	11/8/2022	UP DFW Properties LLC	3812 Duncan	Forest Hill Tx 76119	5/8/2023	1/11/2023	RES PLUMBING ROUGH	12-3	FAILED
32730	11/8/2022	UP DFW Properties LLC	3812 Duncan	Forest Hill Tx 76119	5/8/2023	1/9/2023	RES PLUMBING ROUGH	12-3pm	FAILED
34501	5/31/2023	Plumbing Consulting Services	9503 Nona Kay	San Antonio, TX 78217	12/1/2023	6/5/2023	RES SEWER REPAIR	12-3 sewer	FAILED
34028	4/10/2023	Alvarado Plumbing	2716 Russ Wood Ln	Plano, Tx 75075	10/10/2023	4/17/2023	RES SEWER REPAIR	12-3	PASSED
35205	9/21/2023	MANUEL MONTES	4620 LEONARD ST	FOREST HILL TX	3/21/2024	9/29/2023	RES UNDERGROUND	12-3pm	FAILED
34072	4/18/2023	SOLOMAN MADRIGAL	1122 HAWTHORNE AVE	JANETH.MADRIGAL @YAHOO.COM	10/18/2023	6/6/2023	RES UNDERGROUND	12-3pm underground	PASSED
34448	5/23/2023	LD Plumbing LLC	8351 Camp Bowie W Blvd	Ft Worth, TX 76116	11/23/2023	5/31/2023	RES UNDERGROUND	12-3pm	Complete

CITY OF FOREST HILL
INSPECTION RECORDS
SORTED BY LAND DISTURBANCE TYPE

34314	5/5/2023	Circle R Electric		3620 Race St	Ft Worth, TX	11/5/2023	5/22/2023	RES UNDERGROUND	undergrounds need to enter from 6602 682-240-0033	PASSED
33559	3/7/2023	JOSE GOMEZ		3721 COBBLESTONE	FOREST HILL TX 76140	9/7/2023	3/20/2023	RES UNDERGROUND	12-3PM PLUMBING UNDERGROUND	PASSED
33365	2/14/2023	ROMAN ROSALES		1214 S AKARD ST		8/14/2023	3/14/2023	RES UNDERGROUND	12-3pm underground	PASSED

CONSTRUCTION SITE EROSION CONTROL CHECKLIST
3219 California Parkway, Forest Hill, TX 76119
Phone: (817) 806-4561 Fax: (817) 568-3049

CITY OF Forest Hill
COMMUNITY DRIVEN

I. Erosion Control

Disturbed areas must be stabilized to prevent the introduction of sediment to adjacent wetlands or water bodies during wet weather conditions (erosion). ***At least one (1)*** of the following BMPs must be maintained and remain in place until the area has been stabilized.

- ☐ Temporary Vegetation
- ☐ Blankets / Matting
- ☐ Mulch
- ☐ Sod
- ☐ Erosion Control Composts *
- ☐ Compost Filter Berms & Socks *
- ☐ Mulch Filter Berms & Socks *

(a)	Is this BMP installed correctly?	☐ Yes	☐ No
(b)	Is the BMP in need of repair?	☐ Yes	☐ No

II. Post-Construction TSS Control

After construction has been completed and the site is stabilized, total suspended solids (TSS) loadings shall be controlled by ***at least one (1)*** of the following BMPs.

- ☐ Retention / Irrigation
- ☐ Extended Detention Basin
- ☐ Vegetative Filter Strips
- ☐ Constructed Wetlands
- ☐ Wet Basins

(a)	Is this BMP installed correctly?	☐ Yes	☐ No
(b)	Is the BMP in need of repair?	☐ Yes	☐ No

III. Sedimentation Control

Prior to project initiation, the project area must be isolated from adjacent wetlands and water bodies by the use of the BMPs to confine sediment. ***At least one (1)*** of the following BMPs must be maintained and remain in place until project completion.

- ☐ Sand Bag Berm
- ☐ Silt Fence
- ☐ Triangular Filter Dike
- ☐ Rock Berm
- ☐ Hay Bale Dike
- ☐ Erosion Control Compost *
- ☐ Compost Filter Berms & Socks *
- ☐ Mulch Filter Berms & Socks *

(a)	Is this BMP installed correctly?	☐ Yes	☐ No
(b)	Is the BMP in need of repair?	☐ Yes	☐ No

Dredged material shall be placed in such a manner that prevents sediment runoff into water in the state, including wetlands. Water bodies can be isolated by the use of one or more of the required BMPs identified for sedimentation control. These BMPs must be maintained and remain in place until the dredged material is stabilized.

Hydraulically dredged material shall be disposed of in contained disposal areas. Effluent from contained disposal areas shall not exceed a TSS concentration of 300 mg/L.

IV. Contaminated Dredge Material

If contaminated dredge material that was not anticipated or provided for in the permit application in encountered during dredging, operations shall cease immediately. Pursuant to §26.039 (b) of the Texas Water Code, the individual operating or responsible for the dredging operations shall notify the Commission's Emergency Response Team at (512) 463-7727 as soon as possible, and not later than 24 hours after the discovery of the material. The applicant shall also notify the U.S. Army Corps of Engineers (Corps) that activities have been temporarily halted. Contaminated dredge material shall be remediated or disposed of in accordance with TCEQ rules. Dredging activities shall not be resumed until authorized in writing by the Commission.

"Contaminated dredge material" is defined as dredge material which has been chemically, physically, or biologically altered by man-made or man-induced contaminants which include, but not limited to "solid waste", "hazardous waste", and 'hazardous waste constituent" as those terms are defined by 30 Texas Administration Code (TAC) Chapter 335, "Pollutants" as defined by Texas Water Code § 26.001 and "Hazardous Substances" as defined in the Texas Health and Safety Code, § 361.003.

V. Wetland Mitigation Requirements

Where wetland mitigation is determined to be necessary by the Corps, the applicant must satisfy the minimum success criteria established by the Corps including wetland hydrology, hydrophytic, vegetation, and two years of monitoring. If that criteria includes less than two years of monitoring, the applicant may request water quality certification under Section 401.

*VI. Compost Requirements

New types of erosion control compost (ECC) and compost and mulch filter berms and socks are continuously being developed. The Texas Department of Transportation (TxDOT) has established minimum performance standards which must be met for any products seeking to be approved for use within any of TxDOT's construction or maintenance activities. Material used within any TxDOT construction or maintenance activities must meet material specifications in accordance with current TxDOT specifications. TxDOT maintains a website at http://www.txdot.gov/business/contractors_consultants/recycling/compost_row.htm that provides information on Use of Compost and Shredded Wood on Rights of Way. This website also contains information on areas where the TCEQ restricts the use of certain compost products.

ECC and compost and mulch filter berms and socks used for projects not related to TxDOT should also be of quality materials by meeting performance standards and compost specification data. To ensure the quality of compost used as an ECC, products should meet all applicable state and federal regulations, including but not limited to the United States Environmental Protection Agency (USEPA) Code of Federal Regulations (CFR), Title 40, Part 503 Standards for Class A biosolids and Texas Natural Resource Conservation Commission (now named TCEQ) Health and Safety Regulations as defined in the TAC, Chapter 332, and all other relevant requirements for compost products outlined in TAC, Chapter 332. Testing requirements required by the TCEQ are defined in TAC Chapter 332, including Sections §332.71 Sampling and Analysis Requirements for Final Products and §332.72 Final Product Grades. Compost specification data approved by TxDOT are appropriate to use for ensuring the use of quality compost materials or for guidance.

Testing standards are dependent upon the intended use for the compost and ensures product safety, and product performance regarding the product's specific use. The appropriate compost sampling and testing protocols included in the United States Composting Council (USCC) Test Methods for the Examination of Composting and Compost (TMECC) should be conducted on compost products. TMECC information can be found at http://www.tmecc.com/. The USCC Seal of Testing Assurance (STA) program contains information regarding compost STA certification. STA program information can be found at http://compostingcouncil.org/section.cfm?id=35.

VII. Coastal Zone Management Act

In accordance with 31 TAC §506, all projects located in the coastal zone boundary shall be consistent with the Texas Coastal Management Program.

Applicant should sign and return the original statement and completed checklist to the U.S. Army Corps of Engineers and send a copy to the TCEQ. Questions regarding the checklist should be directed to the TCEQ.

U.S. Army Corps of Engineers
Regulatory Branch
1100 Commerce Street
Dallas, TX 75242
(469) 487-7007

Water Quality Assessment Section - 401 Coordinator
Texas Commission on Environmental Quality
MC-150
P.O. Box 13087
Austin, Texas 78711
(512) 239-4671
Fax (512)239-4420

Applicant's Name (please print):_____

Applicant's Email: _____

Corps Project Manager or Regulatory Specialist (if known):
_____

Permit Number (if known):_____

I will incorporate all of the above requirements and selected BMPs (Items I, II, and III) into my proposed project. I understand that these requirements and BMPs as described above will be part of my Section 404 permit, and failure to implement any of them will constitute a permit violation.

Date: _____

Applicant Signature: _____

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Post-Construction Stormwater Management in New Development and Redevelopment**
BMP Title:	***Ordinance for Post-Construction Stormwater Management***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue operations under ordinance passed in 2018. Annually review ordinance and determine if revisions are necessary.

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 City continues to enforce the post-construction ordinance that was adopted in 2018. There have been no incidents to report, but the City actively inspects construction sites with proposed post-construcion BMPs.

   (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 City be able to enforce the post-construction requirements for new development, and renewed development sites, so that stormwater pollutants are reduced for long term.

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:	**Post-Construction Stormwater Management in New Development and Redevelopment**
BMP Title:	***Post-Construction Inspections***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Document the number of sites inspected.

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

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

   Currently there is no construction project that contain structural post – construction BMP in the City of Forest Hill.

   (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.

   Performing site inspections ensures proper installation of post-construction controls and reduces the amount of pollutants is post – construction 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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Inventory of City Facilities***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Annually review inventory of City-owned facilities and revise, if necessary.

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 City maintains an inventory of City-owned and operated facilities and stormwater controls in the MS4. The City will update the inventory list 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.

   Preparing and maintaining an inventory of City-owned facilities tracks possible sources or pollutants 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 ☒

City – Owned Facilities

City Hall
North Tower
South Tower
Public Works Facility
Police Department
Fire Department
Fire Substation
Fire Training Grounds
Animal Control Center
Civic/Community Center
Former Call Center
Senior Citizens Center
Railroad Association Center
Lift Station
Pump Station
Shamrock Old Wellsite
Carriage Hill Old Wellsite
Wichita Old Wellsite
Griggs Old Wellsite

City – Owned Parks

South Linear Park
Emily Trentman Park
Leo Spicer Park
Jerline Harvey Park
Hanger Meditation Park
Jewell Kelly Park
Memorial Park

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Waste Disposal Procedures***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing waste disposal practices. Document waste disposal amounts removed from City facilities on an annual basis.

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 City utilizes Waste Connection for trash and recycling needs for the entire City. Waste from City facilities are disposed of at least five times a week.

   (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 provide proper waste disposal to ensure waste is not entering local waterbodies.

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:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Municipal Contractor Oversight***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Implement new municipal contractor oversight procedures.

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 City of Forest Hill reviewed the current standard municipal contract. No changes deemed 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.

   Implementing contractual requirements to contractor's subject to stormwater requirements will ensure that contractors are using 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 ☒

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Street Cleaning Program***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing street cleaning program. Annually document activities included in program (miles cleaned, ton of debris removed, etc.)

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 City of Forest Hill conducted street sweeping for all 4 zones within the City limits. The City has recorded the dates and locations for when street sweeping was performed for each zone in 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 perform routine street sweeping to remove debris and trash from streets that would otherwise remain in a nearby inlet.

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 ☒

Street Sweeping Log

2023 STREET SWEEPING LOG

2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Horton Rd.	3200-3300	1		21 //	23 //	// 7	12 //	9 // 11
Cardinal Ridge	3200-3300	1		21 //	23 //	// 7	12 //	9 // 11
George	3200-3300	1		21 //	23 //	// 7	12 //	9 // 11
Burleson	5600-6500	1		21 //	23 //	// 7	12 //	9 // 11
Devalcourt Ave.	3200-3300	1		21 //	24 //	// 8	12 //	9 // 11
Shepard	3200-3300	1		21 //	24 //	// 8		9 // 11
Orchard	3200-3300	1		21 //	24 //	// 8		9 // 11
Grady	3200-3300	1		21 //	24 //	// 8		13 // 12
Mary Ann	3200	1		21 //	24 //	// 8		13 // 12
Shamrock	3200-3300	1		21 //	24 //	// 8		13 // 12
Oak Timber	3200-6400	1		21 //	24 //	// 8		13 // 12
Shamrock Ct.	6200	1		21 //	24 //	// 8		13 //
Forest Hill Dr.	5300-6400	1	17 //	21 //	24 //	// 8		13 //
Railfence	3300	1		21 //	24 //			13 //
Railfence Ct.	6400	1		21 //	24 //			13 //
Hanger Park	6300	1		21 //	24 //			13 //
Landmark	3200-3300	1		21 //	24 //			13 //
Saddlehorse	3200-3300	1		21 //	24 //			14 //
Centennial	3200-3300	1		22 //	24 //			14 //
Banbury Ct.	3500	1		22 //	24 //			14 //
Alhambra	3400-3800	1		22 //	24 //			14 //
Alhambra Ct.	3500	1		22 //	24 //			14 //
Archer	3500-3600	1		22 //	25 //			14 //
Evonshire	6400-6500	1		22 //	25 //			14 //
Yorkshire	6400-6500	1		23 //	25 //			14 //
Duer	3400	1		23 //	25 //			14 //
Banbury	6100-6500	1		23 //	25 //			14 //
Friar Ct.	6300-6400	1		23 //	25 //			15 //
Oak Haven	3400-3800	1		23 //	25 //			15 //
Grady	3400-3800	1		23 //	25 //			15 //
Falcon	3400-3800	1		23 //	25 //			15 //
Forest Edge	6100	1		23 //	25 //			15 //
Triumph	3800	1		23 //	25 //			15 //

STREET SWEEPING LOG
2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Orchard	3400	1		23 //	25 //			
Story	3400	1		22 //	25 //			9 //
Brambleton Place	3400-4200	1		23 //	25 //			15 //
Crawford Lane	5700-6400	1	5 //	22 //	25 //			16 //
Forest Haven	5800-6100	1		23 //	25 //			8 //
Duncan	3700-5800	1	5 //	23 //	25 //			8 //
Capital	5800	1		23 //	25 //			
Panama	3900-4000	1	5 //	23 //	25 //			
Frisco	5700-5800	1	5 //	23 //	25 //			8 //
Forest Oak	5700-5800	1		23 //	25 //			
Estes	5700-5800	1		23 //	31 //			
Spencer	5700-5800	1		23 //	31 //			
Truett	5600-6000	1		22 //	31 //			
Burly	4100-4300	1	5 //	24 //	31 //			
Bowlingreen	4100-4200	1	5 //	24 //	31 //			
Hartman	6000-6300	2	5 //	24 //	31 //			
Marshall	4100-4600	2	5 //	24 //	31 //			
Griggs	6100-6300	2	5 //	24 //	31 //			
Twin Oaks	6100-6300	2	5 //	24 //	31 //			
Forest Glen	4500	2		24 //	31 //			
Wanda	6100-6300	2	9 //	24 //	31 //			
Richard	4300-4600	2	9 //	24 //	31 //			
Maiden Lane	6000	2	9 //	27 //	31 //			
Dorsey	4400-4600	2		27 //	31 //			
Matthews Ct.	4700	2	9 //	27 //	31 //			
Leonard	4700	2	9 //	27 //	31 //			
Shady Hill	4700-6500	2	9 //	27 //	31 //			
Alandale	4700-4800	2	9 //	27 //	31 //			
Dorsey	4700-4800	2	9 //	27 //	31 //			
Melinda	4700-4800	2		27 //	31 //			
Forest Knoll	4700	2		27 //	31 //			

STREET SWEEPING LOG

2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Forest Wood	4700	2	10 //	27 //	31 //			
Richard	4700	2	10 //	27 //	31 //			
Marshall	4700-4800	2	10 //	27 //	31 //			
Anglin Dr.	6100-6600	2	10 //	27 //	31 //	3 //		
Packard Ct.	4900	2	10 //	27 //		3 //		
Scottsdale	6300-6600	2	10 //	27 //		3 //		
Queen Ann	5000-5100	2	10 //	27 //		3 //		
Melinda	4900-6500	2	10 //	27 //		3 //		
Regal Rd.	6300-6500	2	10 //	27 //		3 //		
Royal Oaks	6300-6500	2	10 //	// 10		3 //		
Embassy	6400	2	10 //	// 10		3 //		
Suellen	6300	2	10 //	// 10		3 //		
California Pkwy.	3200-5200	2		// 10				
Woodview	4700	3		// 10		3 //		
Woody Lane	4700	3	6 //	// 10		3 //		
Trailwood	6600-6800	3	6 //	// 10		3 //		
Wanda	6800	3	6 //	// 10		3 //		
Windy	4500	3	6 //	// 10		3 //		
Twin Oaks	6800	3	6 //	// 10		3 //		
Parkwood	4400-4700	3	9 //	// 10		3 //		
Griggs Ct.	4500	3	9 //	// 10		3 //		
Griggs St.	6800-6900	3		// 10		3 //		
Margaret	6600-6900	3						
Alma	6600-6900	3						
Casey	4400	3						
Forest Hill Circle	3400-5100	3	6 //					
Anglin Dr.	4700	3						
Tina Ct.	6500	3	10 +18 //					
Rose Ct.	6500	3	10 //					
Maurice Ct.	6500	3	10 //					
Manordale	3400-6700	3	10 //					
Carriage Hill	3400-3700	3	10 //					
Wagonet	6700-6800	3	10 //					

STREET SWEEPING LOG

2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Rustic	6700-6800	3	11 //	// 11				
Robindale	6600-6800	3	11 //	// 11				
Plantation	6600-6800	3	11 //	// 11				
Rough Creek	3600-3700	3	11 //	// 11				
Cobblestone	3400-3700	3	11 //	// 11				
Cobblestone Ct.	6900	3	11 //	// 11				
Candlewick Ct.	7000	3	11 //	// 12				
Shiloh Ct.	7000	3	11 //	// 12				
Chimney Rock	3400-3600	3	11 //	// 12				
Anmar Ct.	3400	3	11 //	// 12				
Appletree Ct.	3400	3	11 //	// 12				
Chatham Ct.	3400	3	11 //	// 12				
Falmouth	7300	3	11 //	// 12				
Woodbridge	3400-7300	3	11 //	// 12				
Nantucket	3500-7400	3	11 //	// 12				
Meadows	3500-7300	3	11 //	// 12				
Folkstone	7300-7500	3	11 //	// 12				
Alandale	4900	2	11 //	// 12				
Republic	3400	4	11 //	// 12				
Colonial	3400-7200	4	11 //	// 12				
Tradition	7200-7300	4	11 //	// 12				
Salem Ct.	3300	4	11 //	// 12				
Chalmette Ct.	3200-3300	4	11 //	// 12				
Lee	7300	4	11 //	// 14				
Merrimac	3200-3300	4	11 //	// 14				
Appomattox	3200-3300	4	11 //	// 14				
Chancellorsville	3200-3300	4	11 //	// 14				
Concord	7000	4	11 //	// 14				
Lexington	7000	4	11 //	// 14				
Ronay	3000-3100	4	11 //	// 14				
Autumn Run	3000-7200	4	11 //	// 14				
Autumn Park	7200	4	11 //	// 14				
Autumn Lea	3000	4	11 //	// 14				

STREET SWEEPING LOG
2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Autumn Glen	7200	4	11 //	// 13	// 1			
Misty Dawn	7200	4	11 //	// 13				
Stonewall	7100-7300	4	11 //	// 13				
Heritage	3000-3400	4	11 //	// 13				
Bunker Hill	3200-3300	4	11 //	// 13				
Lookout	3200-3300	4	11 //	// 13				
Yorktown	3100-3300	4	12 //	// 13				
California Pkwy.	3200	4						
Forest Hill Circle	4500	4						
Forest Hill Dr.	7500	4	18 //					
Windward Way	6900	4	12 //					
Mary Hill	6900	4	12 //	// 13				
Stephens Hill	6900	4	12 //	// 13				
Windy Hill	6900	4	12 //	// 13				
Knob Hill	6900	4	12 //	// 13				
Stonewall	6900	4	12 //	// 13				
Gettysburg	6900	4	12 //	// 13				
Shenandoah	6900	4	12 //	// 13				
Rebel	6900	4	12 //	// 13				
Old Hickory	3000-3300	4	12 //	// 13				
Jamestown	3100-3300	4	12 //	// 13				
Valley Forge	3000-3300	4	12 //	// 13				
Saddlehorse	6300-6400	1	12 //	// 13				
Guilford	6300-6400	1	12 //					
David Lane	3800	1						
Donna Lane	6400	1						
Forest Haven	6100	1						
Frisco	3900-4000	1						
West	3500-3600	1						9 //
Crawford Lane	5700-6500	1						
Crawford Ct.	6400	1						
Nell	6000	1						
Burly	4100-4500	1						
Andrea Lane	4200	1						

STREET SWEEPING LOG
2023

STREET	BLOCK	ZONE	JAN//FEB	MAR//APR	MAY//JUN	JUL//AUG	SEPT//OCT	NOV//DEC
Anglin	6600-6800	3	11 //					
Forest Hill Dr.	5300-7500	3	11 + 18 //					
Rosecrest	7300-7500	3	11 //					
Park Avenue	3700-7500	3	11 //					
Jazmine	3700	3	11 //					
Zinnia	7500	3	10 //					
Star Gazer	3700-7500	3	10 //					
Cecelia	3700	3	10 //					
Dutch Iris	3700	3	10 //					
Caladium	3700-7400	3	10 //					
Water Well	7400	3						
Autumn Moon	7200	4	10 //					
Forest Hill Ct.	3400	1						
Fredericksburg	7300	4	10 //					
Wichita	5600-6400	1						
Wichita (Civic Center parking lot)	6901					//7		
Park Run	6555	4						
Park Brook	6555	4						
Park Forest	6555	4						
Park Oak	6555	4						
Independence		4	12 //					
Interstae 20/SE Loop 820	3200 - 3300							

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Stream and Creek Maintenance***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing stream and creek program. Annually document activities included in program (length of streams included, amount of debris removed, etc.)

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

   For Year 5, the City conducted routine drainage ditch maintenance. Maintenance included: removing trash and debris, mowing and weedeating, and removing trees and bushes. The City has recorded dates, locations, and maintenance performed in drainage ditch.

   (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 maintain drainage ditches to ensure proper drainage and to prevent trash and debris from entering 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 ☒

Drainage Ditch Maintenance Log

DRAIN DITCH MAINTENANCE- 2023

JANUARY DATE	LOCATION	ACTIVITY
1/24/2023	Throughout City	checked for obstructions/bloackages after heavy rainfall

MARCH DATE	LOCATION	ACTIVITY
3/20/2023	On Nell between Burly and Bowling Green,	weeding and mowed
	5702 Crawford Lane	picked up trash, weeding and mowed
3/22/2023	Cobblestone	mowed
3/23/2023	4020 Mansfield Highway, 3600 Orchard + 4761 Marshall	picked up trash, weeding and mowed
3/27/2023	6555 Park Brook + 3350 Forest Hill Circle,	weeding and mowed
	3553 Forest Hill Circle	weeding
3/28/2023	6808 Forest Hill Drive, 3300 Lookout, 6201 Anglin Drive,	weeding
	4208 Mansfield Highway	
3/29/2023	3600 - 3700 blocks of Cobblestone,	weeding and mowed
	3500 - 3700 block of Carriage Hill Drive	
3/30/2023	Lon Stephenson Road, 3500 Cobbletone,	weeding and mowed
	6901 Forest Hill Drive	
3/31/2023	3500 Cobblestone	weeding and mowed

APRIL

DATE	LOCATION	ACTIVITY
4/11/2023	4020 Mansfield Highway + 5702 Crawford Lane	picked up trash, weeding and mowed
4/12/2023	3600 Orchard, 4200 Burly,	picked up trash, weeding and mowed
	4208 Mansfield Highway	weeding and mowed
4/19/2023	3553 Forest Hill Circle	weeding
	3350 Forest Hill Circle	weeding and mowed
4/20/2023	6555 Park Brook	weeding and mowed
	6808 Forest Hill Drive	weeding
4/24/2023	Guilford	weeding
4/26/2023	5702 Crawford Lane	weeding and mowed

MAY

DATE	LOCATION	ACTIVITY
5/3/2023	Nell Street, Orchard, Crawford Lane, Forest Hill Circle, Burly	picked up trash, weeding and mowed
5/4/2023	Cowtown Bus Barn	excavated
5/5/2023	Cowtown Bus Barn	excavated
5/16/2023	5702 Crawford Lane	picked up trash, weeding and mowed
5/22/2023	3350 + 3553 Forest Hill Circle + Independence/Lookout	picked up trash, weeding and mowed
5/24/2023	Carriage Hill, Alma, Valley Forge, Cobblestone	weeding and mowed
5/25/2023	behind Denny's + Hampton Inn	weeding
	Carriage Hill	
5/30/2023	Carriage Hill	picked up trash, weeding and mowed

JUNE

DATE	LOCATION	ACTIVITY
6/5/2023	On Folkstone from Woodbridge - Nantucket	weeding
6/6/2023	Rose Crest (concret ditch)	weeding
6/8/2023	On Nell from Burly - Bowling Green,	picked up trash, weeding and mowed
	5702 Crawford Lane, 4020 + 4208 Mansfield Highway,	
	3600 Orchard, 4020 Mansfield Highway,	
	Parker Henderson , Melinda Drive	removed dirt
6/14/2023	Cobblestone	mowed
6/21/2023	3553 Forest Hill Circle	weeding
6/26/2023	Carriage Hill, 6555 Park Brook, behind CVS	weeding and mowed
6/28/2023	6000 blk. Nell - between Burly + Bowling Green)	weeding and mowed
	3400 blk. Cobblestone, 3500 blk. Carriage Hill	
6/29/2023	5702 Crawford Lane, 4020 + 4208 Mansfield Highway	weeding and mowed

JULY

DATE	LOCATION	ACTIVITY
7/5/2023	Behind 3219 California Parkway	weeding
7/6/2023	Behind 3219 California Parkway	weeding
7/11/2023	6200 Anglin, 3600 Orchard, , 6808 Forest Hill Dr., 4233 Burly,	weeding
	6000 Nell, Lookout/Independence	weeding and mowed
7/12/2023	Behind 3370 Mansfield Highway	weeding
7/13/2023	3350 Mansfield Highway	weeding and mowed
	3553 Forest Hill Circle	weeding
7/18/2023	6555 Park Brook	weeding and mowed
7/25/2023	On Folkstone between Woodbridge + Nantucket	weeding
7/28/2023	3350 + 3553 Forest Hill Circle + 6555 Park Brook	weeding

AUGUST

DATE	LOCATION	ACTIVITY
8/2/2023	Behind 4208 + 4020 Mansfield Highway + Crawford Lane	weeding
8/3/2023	7400 Rose Crest Blvd., 7400 Park Avenue	weeding (fence line)
8/9/2023	Horton/Burleson	weeding and mowed
8/10/2023	3400 Cobblestone	weeding and mowed
8/22/2023	behind 3219 California Parkway	weeding
8/23/2023	6800 Alma + 6900 Margaret	weeding

SEPTEMBER

DATE	LOCATION	ACTIVITY
9/7/2023	3350 + 3553 Forest Hill Circle	weeding and mowed
9/11/2023	5702 Crawford Lane	picked up trash
9/18/2023	5702 Crawford Lane	picked up trash, weeding and mowed
9/19/2023	3600 Orchard	picked up trash, weeding and mowed
9/26/2023	Behind 4208 + 4020 Mansfield Highway	weeding and mowed
9/28/2023	Lookout + Independence	weeding and mowed
9/29/2023	3350 Forest Hill Circle + 6550 Forest Hill Drive	weeding and mowed

OCTOBER

DATE	LOCATION	ACTIVITY
10/12/2023	Carriage Hill	mowed
10/16/2023	6100 Nell, Carriage Hill Drive, Pump Station, Lift Station	picked up, trash, weeding and mowed

NOVEMBER

DATE	LOCATION	ACTIVITY
11/16/2023	4208 Mansfield Highway, 3550 Forest Hill Circle,	weeding, mowed and trimmed trees/bushes
	3553 Forest Hill Circle	
11/17/2023	Woodbridge/Nantucket, 4200 Burly, 3600 Orchard	weeding and mowed
11/27/2023	Carriage Hill	mowed

DECEMBER

DATE	LOCATION	ACTIVITY
12/8/2023	Behind Railroad Association Center	trimmed trees/bushes

STORMWATER MANAGEMENT PROGRAM

ANNUAL REPORT FORM

MCM:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Structural Control Maintenance***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Continue existing maintenance program. Annually document activities included in program (length of streams included, amount of debris removed, etc.)

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 City continues to implement structural control maintenance. For Year 5, the City has inspected and maintained 44 manholes, 11 outfalls, and 121 inlets. The City has documented the dates, location, and maintenance performed at the various structural controls. These activities are documented in the BMPs above.

   (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 City to inspect and maintain structural controls to ensure proper drainage and remove trash and debris that can otherwise end up in a local waterway.

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:	**Pollution Prevention/Good Housekeeping for Municipal Operations**
BMP Title:	***Storm Drain Inlet Marking***
Responsible Department:	Public Works
Measurable Goal:	Year 5 – Re-mark inlets as necessary.

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 City has marked most of its inlets.

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

The City is currently searching for bilingual stencils for marking inlets. Inlets will be re-marked with new stencil.

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.

Investigating feasibility for stencils is beneficial to the program. Marking the storm drain inlets remind residents that the drains are directly connected to creeks and streams, discouraging any illegal dumping that could pollute storm water.

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 ☒

Inlet Marking