

## Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

### A. General Information

Authorization Number: **TXR040030**

Reporting Year (year will be either 1, 2, 3, 4, or 5): **5**

Annual Reporting Year Option Selected by MS4:

Calendar Year \_\_\_\_\_

Permit Year \_\_\_\_\_

Fiscal Year: **X** Last day of fiscal year: (**September 30<sup>th</sup>**)

Reporting period beginning date: (month/date/year) **10/01/2017**

Reporting period end date (month/date/year) **9/30/2018**

MS4 Operator Level: **2** Name of MS4: **Orange County**

Contact Name: **Clark Slacum** Telephone Number: **(409)882-7905**

Mailing Address: **11475-D FM 1442, Orange, TX 77630**

E-mail Address: **cslacum@co.orange.tx.us**

A copy of the annual report was submitted to the TCEQ Region YES **X** NO \_\_\_\_\_  
Region the annual report was submitted. TCEQ Region **10**

## B. Status of Compliance with the MS4 GP and SWMP

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

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	X		
Permittee is currently in compliance with recordkeeping and reporting requirements.	X		
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	X		

2. Provide a general assessment of the appropriateness of the selected BMPs. You may use the table below (**See Example 1 in instructions**):

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1	Flyers and Brochures	Yes, the distribution of flyers and brochures help educate the public on potential stormwater pollutants and provides the details on steps they can take to improve stormwater quality.
1	Develop Materials for Local Schools/Libraries	Yes, the development of materials for schools/libraries helps educate children on potential stormwater pollutants and provides the details on steps they can take to improve stormwater quality.
1	Education of Construction Site Personnel	Yes, education of construction site personnel helps bring awareness of pollutants associated with construction activities.
1	Public Service Announcements	Yes, public service announcements help educate the public on potential stormwater pollutants and provides the details on steps they can take to improve stormwater quality.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1	Storm Drain Marking	Yes, storm drain marking helps educate the public on the effects that illegal dumping/illicit discharges have on our water quality.
1	Stormwater Quality Website	Yes, the development of a stormwater quality website helps educate the public on potential stormwater pollutants and provides the details on steps they can take to improve stormwater quality.
1	Public Notice	Yes, the public notice process helps educate the public about their local stormwater management programs and gives them an opportunity to participate.
1	SWMP Availability	Yes, making the SWMP available helps educate the public on their local stormwater management program and the associated implementation schedule.
1	SWMP Committee	Yes, having a designated SWMP committee allows the SWMP to be implemented more effectively.
1	Public Meetings	Yes, public meetings help educate the public about their local stormwater management programs and gives them an opportunity to participate.
1	Stormwater Hotline	Yes, stormwater hotlines allow citizens to report illicit discharges, illegal dumping, spills, etc. for proper clean-up.
1	Clean-up Events	Yes, clean-up events provide the public with an opportunity to participate in the SWMP and help encourage the proper disposal of waste.
2	MS4 Outfall Map	Yes, developing and maintaining a MS4 outfall map makes the illicit discharge detection and elimination program more effective.
2	MS4 Outfall Inspections	Yes, inspecting MS4 outfalls helps identify and eliminate illicit discharges.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
2	Regulatory Mechanisms	Yes, having regulatory mechanisms/procedures in place helps encourage individuals to comply with stormwater quality regulations.
2	MS4 Field Staff Training	Yes, MS4 field staff training helps educate permittee employees on how to properly identify and eliminate stormwater pollutants.
2	IDDE Procedures	Yes, the development and implementation of IDDE procedures makes the Illicit Discharge program more effective.
2	Public Reporting	Yes, providing the public with instructions on how to properly report potential stormwater quality concerns helps identify and eliminate illicit discharges more effectively.
3	Construction Site Plan Review	Yes, reviewing construction site plans for the inclusion of appropriate structural controls helps reduce the amount of pollutants being discharged from construction sites.
3	Construction Site Inspection/Enforcement	Yes, inspecting construction sites for proper installation/maintenance of structural controls helps reduce the amount of pollutants being discharged from construction sites.
3	Regulatory Mechanisms	Yes, having regulatory mechanisms/procedures in place helps encourage individuals to comply with stormwater quality regulations.
3	Construction Site Notice Posting	Yes, posting appropriate construction site notices at permittee owned construction sites helps notify inspectors/citizens that the applicable permit coverage has been obtained and a SWPPP is being implemented to reduce pollutant discharges.
3	Public Reporting	Yes, providing the public with instructions on how to properly report potential stormwater quality concerns helps identify and eliminate illicit discharges more effectively.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
3	MS4 Staff Training	Yes, MS4 staff training helps educate permittee employees on how to properly identify and eliminate stormwater pollutants.
4	Development Project Plan Review	Yes, reviewing development plans for the inclusion of appropriate structural controls helps reduce the amount of pollutants being discharged from construction sites.
4	Inspection of Post Construction Control Measures	Yes, inspecting post-construction control measures helps reduce the amount of pollutants being discharged from large development projects.
4	Regulatory Mechanisms	Yes, having regulatory mechanisms/procedures in place helps encourage individuals to comply with stormwater quality regulations.
5	MS4 Facility Inventory	Yes, developing an inventory of applicable MS4 facilities and conducting inspections helps reduce the amount of pollutants being discharged from permittee facilities.
5	Employee Training Program	Yes, conducting employee training helps educate permittee employees on how to properly identify and eliminate stormwater pollutants.
5	Disposal of Waste	Yes, proper disposal of waste helps reduce the amount of floatables being discharged to the storm sewer system.
5	Contractor Oversight Procedures	Yes, the development and implementation of contractor oversight procedures helps reduce the amount of pollutants being discharged by contractors performing maintenance activities on behalf of the permittee.
5	Operation and Maintenance Activities	Yes, inspecting permittee facilities helps ensure that appropriate BMPs are being implemented to reduce the amount of pollutants being discharged.
5	MS4 Structural Controls	Yes, installation and maintenance of MS4 structural controls helps reduce the amount of pollutants being discharged from permittee facilities.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
5	Vehicle and Equipment Maintenance	Yes, conducting routine maintenance and repairs on permittee owned equipment helps reduce the amount of pollutants being discharged from municipal operations.
5	Litter/Garbage Collection	Yes, conducting litter/garage collection helps reduce the amount of floatables being discharged to the storm sewer system.
5	Maintain Municipally Owned Construction Sites	Yes, installing and maintaining appropriate structural controls at municipal construction sites helps reduce the amount of pollutants being discharged from permittee owned construction sites.
5	Permittee Parking Lots	Yes, inspecting permittee owned parking lots and performing maintenance helps reduce the amount of pollutants being discharged form municipally owned facilities.

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. You may use the table (**See Example 2 in instructions**):

<b>MCM</b>	<b>BMP</b>	<b>Parameter</b>	<b>Quantity</b>	<b>Units</b>	<b>Does BMP Demonstrate a Direct Reduction in Pollutants? (Yes / No / Explain)</b>
1	Flyers and Brochures	estimated quantities of materials distributed or posted	280 After the Storm brochures, 280 pet waste brochures	materials	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.

1	Develop Materials for Local Schools/ Libraries	estimated quantities of education materials distributed	100 stormwater coloring books	coloring books	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.
1	Education of Construction Site Personnel	estimated quantities of educational materials or guidance documents distributed	280 brochures/ stormwater website	materials	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.
1	Public Service Announcements	number of PSAs	4 PSAs on stormwater quality website	materials	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.
1	Stormwater Quality Website	number of website updates and estimated number of hits	1 update; 3 site visits	site visits/ updates	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.
1	SWMP Availability	methods of making SWMP available	SWMP made available on stormwater quality website	locations	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.
1	SWMP Committee	number of meetings held and associated sign-in sheets	2	sign-in sheets	No, while the BMP does not result in a direct reduction in pollution, public education is expected to indirectly reduce pollutants by increasing awareness about stormwater quality issues.

1	Stormwater Hotline	estimated number of phone calls received	14	phone calls	Yes, receiving and responding to phone calls concerning illicit discharges allows the permittee to make appropriate corrections to the storm sewer system.
1	Clean-up Events	number of events held and estimated volume of litter collected	2 events ~280 cubic yards of litter collected	number of events and litter collected	Yes, conducting clean-up events reduce the amount of floatables/trash that enters the storm sewer system.
2	MS4 Outfall Inspections	percentage of outfalls inspected	approximately 20% of the total outfalls were inspected	percentage	Yes, locating and eliminating illicit discharges represents a direct reduction in pollutants.
2	Regulatory Mechanisms	number of enforcement actions	0	enforcement actions	Yes, enforcement of local illicit discharge regulations represents a direct reduction in pollutants.
3	Construction Site Plan Review	number of plans reviewed	38	permits	Yes, reviewing plans ensures that appropriate structural controls are being used to reduce pollution.
3	Construction Site Inspection/ Enforcement	number of construction site inspections	83	inspections	Yes, inspection of construction sites ensures that appropriate controls are in place and functioning properly to reduce pollution.
3	Regulatory Mechanisms	number of enforcement actions issued	44	enforcement actions	Yes, enforcement of local construction regulations represents a direct reduction in pollutants.



3	Construction Site Notice Posting	number of applicable permittee owned construction sites	5	site notices	Yes, complying with the Construction General Permit requirements on permittee owned sites helps reduce the amount of pollutants being discharged.
4	Development Project Plan Review	number of plans reviewed	86	plans	Yes, reviewing construction plans ensures that appropriate post construction controls are being used to reduce pollution.
4	Regulatory Mechanisms	number of enforcement actions	0	enforcement actions	Yes, enforcement of post construction site runoff regulations represents a direct reduction in pollution.
5	Litter/Garbage Collection	estimated volume of litter/garbage removed	~287,161.2 cubic yards litter/garbage removed	cubic yards	Yes, conducting litter/garbage collection reduces the amount of floatables and other dumping related waste.
5	Maintain Municipally Owned Construction Sites	number of permittee owned construction sites	5	sites	Yes, inspecting permittee owned construction sites for appropriate controls represents a direct reduction in pollution.
5	Permittee Parking Lots	number of parking lot inspections	142	inspections	Yes, conducting inspections of permittee owned parking lots reduces the potential of pollutants being discharged to the MS4

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (**See Example 3 in instructions**):

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
1	Distribute or post at least 2 types of available brochures per year	Goal Met; developed 280 after the storm brochures and 280 pet waste brochures.
1	Ensure at least 1 type of material is distributed annually for local schools and/or public libraries	Goal Met; developed 100 stormwater coloring books and distributed at public libraries.
1	Make available to construction site personnel at least 1 guidance document, brochure, or webpage on construction site runoff issues each year	Goal Exceeded, guidance document, brochure, and webpage made available to construction site personnel
1	Provide at least 1 PSA to be aired by local media, public access channel, or website at least once per permit term	Goal Met; 4 PSAs posted on stormwater quality website.
1	Mark new storm drains developed during the permit term and maintain existing markers as needed	Goal Met; storm drain markers are added and maintained on an as needed basis.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
1	Update website at least once per permit term	Goal Met; website update was conducted on 2/01/2018.
1	Comply with state and local public notice requirements for applicable events	Goal Met; permittee adhered to public notice requirements during permit renewal process.
1	Make SWMP available to public annually	Goal Met; SWMP made available on stormwater quality website.
1	<sup>(1)</sup> Conduct at least 2 SWMP Committee meetings per year <sup>(2)</sup> encourage local groups to participate at least once per permit term	<sup>(1)(2)</sup> Goal Met; 2 SWMP committee meetings were conducted (2/22/2018; 8/09/2018). Public was invited to attend meeting conducted during permit year 3. (8/22/2016)
1	Conduct public meeting at least once per permit term	Goal Met; public SWMP meeting was conducted during permit year 3. (8/22/2016)
1	Distribute at least 2 types of materials per year that informs the public about reporting stormwater quality concerns	Goal Met; 2 types of brochures and stormwater quality website were made available.
1	Conduct at least 1 clean-up event per permit term and encourage public participation	Goal Exceeded; 2 clean-up events were held and approximately 280 cubic yards of litter/garbage was collected.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
2	Conduct 1 review of the map per permit term. Map outfalls in new development areas on an as needed basis	Goal Met; map review was conducted on 5/02/2018.
2	Inspect approximately 20% of the identified outfalls per year	Goal Met; 185 outfalls were inspected out of 1,083 known outfalls. 100% of all known outfalls were inspected during the permit term.
2	(1)Enforce the local illicit discharge regulations as needed (2)Review and revise existing regulatory mechanisms within 2 years of permit effective date; if necessary	(1)(2) Goal Met; a local stormwater quality ordinance has been developed/revise as required and is enforced on an as needed basis. 0 enforcement actions were issued for illicit discharges during the reporting period.
2	Conduct training for MS4 field staff at least once per permit term	Goal Met; MS4 field staff training has been conducted for all entities in the coalition during the current permit term.
2	Develop and maintain appropriate IDDE procedures	Goal Met; zero illicit discharges were identified during the reporting period, however standard operating procedures are in place for reporting/eliminating illicit discharges.
2	Distribute at least 2 types of media/materials to help facilitate public reporting of illicit discharges	Goal Met; 2 types of brochures and stormwater quality website were made available.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
3	Review applicable construction site plans for compliance with local regulatory mechanisms	Goal Met; 38 stormwater permits were issued this reporting period.
3	Inspect 50% of applicable construction sites per year, or a minimum of 30 inspections	Goal Met; 100% of the applicable sites were inspected during the reporting period. (a total of 83 inspections were performed on the 38 applicable sites)
3	(1)Enforce local construction regulations as needed (2)Review and revise existing regulatory mechanisms within 2 years of permit effective date; if necessary	(1)(2) Goal Met; a local stormwater quality ordinance has been developed/revise as required and is enforced on an as needed basis. (44) 48-hour notices were issued regarding construction regulations during the reporting period.
3	Post an appropriate site notice at each permittee owned construction site subject to the TPDES Construction General Permit TXR150000	Goal Met; 5 permittee owned construction projects were subject to the TPDES Construction General Permit.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
3	Develop procedures for receipt and consideration of information submitted by the public	Goal Met; procedures for receipt and consideration of information submitted by the public have been developed and are currently being implemented.
3	Conduct training for MS4 field staff at least once per permit term	Goal Met; MS4 field staff training has been conducted for all entities in the coalition during the current permit term.
4	Review construction plans for the inclusion of appropriate post-construction controls	Goal Met; 86 construction plans were reviewed during the reporting period.
4	Conduct at least 1 inspection of control measures per permit term	Goal Met; 1 permittee owned control measure was inspected during the current permit term.
4	(1)Enforce the local post construction site runoff regulations (2)Review and revise existing regulatory mechanisms within 2 years of permit effective date; if necessary	(1)(2) Goal Met; a local stormwater quality ordinance has been developed/revise as required and is enforced on an as needed basis. 0 enforcement actions were issued for post construction regulations during the reporting period.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
5	Develop and maintain MS4 facility inventory list and stormwater controls within the regulated area	Goal Met; MS4 facility inventory has been developed along with the standard operating procedures.
5	Conduct at least 1 training session per permit term	Goal Met; employee training has been conducted for all entities in the coalition during the current permit term.
5	Properly dispose of waste materials on a routine basis and maintain documentation regarding disposal procedures	Goal Met; approximately 287,161.2 cubic yards of litter/garbage was removed and properly disposed of.
5	Develop contractor oversight procedures and conduct a review of the procedures once per permit term	Goal Met; contractor oversight procedures have been developed and are currently being implemented.
5	Inspect municipal facilities at least once per permit term	Goal Met; 17 facility inspections have been conducted during the current permit term.
5	Inspect structural controls at least once per year	Goal Met; 1 structural control inspection was conducted during the reporting period.
5	Conduct routine maintenance and repairs on permittee owned equipment	Goal Met; the permittees own 666 vehicles/equipment and conduct routine maintenance and repairs on an as needed basis.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
5	Conduct litter/garbage collection at least once per year within the regulated area	Goal Met; approximately 287,161.2 cubic yards of litter/garbage was removed and properly disposed of.
5	Inspect and maintain permittee owned construction sites as required by the TCEQ Construction General Permit	Goal Met; inspections were conducted in compliance with the TPDES construction general permit during the reporting period.
5	Inspect/maintain permittee parking areas at least once per year	Goal Met; 142 parking lot inspections were conducted during the reporting period.

### C. Stormwater Data Summary

Provide a summary of all information used including any lab results (if sampling was conducted) to assess the success of the SWMP at reducing the discharge of pollutants to the MEP. For example, did the MS4 conduct visual inspections, clean the inlets, look for illicit discharge, clean streets, look for flow during dry weather, etc.? (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(b))

**During the reporting period, the permittees conducted multiple activities to help reduce the discharge of pollutants to the MEP, including but not limited to: outfall inspections, public education, construction site inspections, litter/garbage collection, and parking lot inspections. As a result, the permittees inspected approximately 20% of their MS4, conducted 83 construction site inspections, and collected/properly disposed of approximately 287,161.2 cubic yards of litter/garbage (data for all BMPs implemented during the reporting period to reduce the discharge of pollutants to the MEP is included in Section B.3 of this annual report). After review, the permittees have maintained 100% compliance with their measurable goals and implementation schedule established in the SWMP and believe that the program has been successful at reducing the discharge of pollutants to the MEP.**



## D. Impaired Waterbodies

1. If applicable, explain below any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern: (Refer to MS4 General Permit TXR040000 Part IV Section B.2.(c))

**The permittees have referred to the CWA 303(d) list and existing TMDL Implementation Plans and determined that they are a potential source of the pollutant(s) of concern (with the exception of PCBs in edible tissue) being discharged to Cow Bayou Tidal (stream segment No. 0511), Coon Bayou (stream segment No. 0511B), Adams Bayou (stream segment No. 0508A), Adams Bayou Tidal (stream segment No. 0508), Hudson Gully (stream segment No. 0508C), Gum Gully (stream segment No. 0508B), Sabine River (stream segment No. 0501), Neches River Tidal (stream segment No. 0601), Cow Bayou (stream segment No. 0511A), Terry Gully (stream segment No. 0511E), and Little Cypress Bayou (stream segment No. 0501B). Appropriate focused BMPs and corresponding measurable goals have been developed to reduce the discharge of the pollutant(s) of concern that contribute to the impairment of the water body. The focused BMPs include activities related to TMDL I-Plans, sanitary sewer systems, on-site sewer facilities, oil and grease trap ordinances, MS4 outfall inspections, public reporting, pet waste management, animal shelters, and residential education programs.**

**Our research indicates that PCBs in edible tissue is a legacy pollutant and the permittees are not considered a potential source. Therefore, no additional focused BMPs were developed to target that pollutant.**

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)):

**The permittees are implementing the targeted BMPs and associated measurable goals as outlined in their stormwater management program. During the reporting period, approximately 20% of the identified outfalls were inspected to identify illicit discharges and public education materials were developed to bring awareness about bacteria sources. All focused BMPs are fully implemented. The assessment of progress towards the identified benchmarks will be conducted by the evaluation of program implementation measures.**

3. Report the benchmark identified by the MS4 and assessment activities (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(6)):

<b>Benchmark Parameter</b> <i>(Ex: Total Suspended Solids)</i>	<b>Benchmark Value</b>	<b>Description of additional sampling or other assessment activities</b>	<b>Year(s) conducted</b>
Stream Segment No. – 0511 (1)Bacteria (2)Dissolved Oxygen (3)pH	(1)1882 Billion CFU/day (2)(3) 413 cBOD lbs/day (2)(3)71.4 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0511B (1)Bacteria (2)Dissolved Oxygen	(1)41 Billion CFU/day (2)82 cBOD lbs/day (2)9 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0508 A (1)Bacteria (2)Dissolved Oxygen	(1)81 Billion CFU/day (2)67cBOD lbs/day 9.8 (2)9.8 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0508 (1)Bacteria (2)Dissolved Oxygen	(1)49 Billion CFU/day (2)36.2 cBOD lbs/day (2)3 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0508C (1)Bacteria (2)Dissolved Oxygen	(1)35 Billion CFU/day (2)6.3 cBOD lbs/day (2)1.8 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0508B (1)Bacteria (2)Dissolved Oxygen	(1)20 Billion CFU/day (2)18 cBOD lbs/day (2)2.3 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5

Stream Segment No. – 0511A (1)Bacteria (2)Dissolved Oxygen	(1)N/A (2)410 cBOD lbs/day (2)48 NH <sub>3</sub> N lbs/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5
Stream Segment No. – 0511E Bacteria	1000 Billion CFU/day	20% of the identified outfalls were inspected to identify illicit discharges	Permit Year 1 Permit Year 2 Permit Year 3 Permit Year 4 Permit Year 5

**The permittees assess progress in achieving benchmarks and determining the effectiveness of BMPs by evaluating program implementation measures. The following indicators are utilized to assess progress towards the benchmark(s): the number of illicit discharge sources identified or eliminated, number of public education opportunities conducted, and results of dry weather screening activities. As a result of implementing the focused BMPs, the permittees have inspected approximately 100% of their outfalls and made multiple forms of public education materials available each year that address bacteria sources. After review, the permittees have maintained 100% compliance with the measurable goals and implementation schedule established in their SWMP and believe the continued implementation of these focused BMPs will continue to make progress towards the desired benchmark values.**

4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(4)):

<b>Benchmark Parameter</b>	<b>Selected BMP</b>	<b>Contribution to achieving Benchmark</b>
Bacteria; Dissolved Oxygen; pH	TMDL I-Plans	Compliance with existing TMDL-I Plans will reduce the amount of illicit discharges
Bacteria; Dissolved Oxygen; pH	Sanitary Sewer Overflow (SSO) Plans	Compliance with existing and/or newly approved TCEQ SSO plans will reduce the amount of illicit discharges
Bacteria; Dissolved Oxygen; pH	Sanitary Sewer Capital Improvement Projects	Sanitary sewer improvement projects will reduce the amount of illicit discharges from faulty sanitary sewer collection systems

Bacteria; Dissolved Oxygen; pH	Lift Station Assessment	Visual inspections of lift stations will ensure the lift stations are functioning properly and increase the effectiveness of the program
Bacteria; Dissolved Oxygen; pH	Public Reporting of Sanitary Sewer Overflows (SSOs)	Development of educational materials focused on the identification and public reporting of sanitary sewer overflows will increase the effectiveness of the program
Bacteria; Dissolved Oxygen; pH	Oil and Grease Trap Ordinance	Conducting inspections and requiring routine maintenance of grease traps within the MS4 helps reduce the amount of illicit discharges
Bacteria; Dissolved Oxygen; pH	Failing On-Site Sewer Systems	Identification of failing on-site sewer systems will directly reduce the amount of illicit discharges to the MS4
Bacteria; Dissolved Oxygen; pH	Promote Proper Maintenance of On-Site Sewer Systems	Development of media to facilitate proper maintenance of on-site sewer systems will increase the effectiveness of the program
Bacteria; Dissolved Oxygen; pH	MS4 Outfall Inspections	Conducting outfall inspections will enable the permittee to identify and eliminate illicit discharges
Bacteria; Dissolved Oxygen; pH	Public Reporting	Development of public education materials which raise awareness of stormwater quality and encourage public reporting will increase the effectiveness of the program
Bacteria; Dissolved Oxygen; pH	Pet Waste Management	Promoting proper pet waste management through the development of educational materials will raise awareness on the impacts pet waste has on water quality
Bacteria; Dissolved Oxygen; pH	Animal Shelters, Zoos and/or horse Stables	Promoting proper pollution controls at municipally owned animal shelters, zoos and/or horse stables will help reduce the pollutant(s) of concern entering the MS4

Bacteria; Dissolved Oxygen; pH	Residential Education for Bacterial Sources	Development of public education materials which raise awareness of stormwater quality and encourage public reporting will increase the effectiveness of the program
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5. If applicable, report on focused BMPs to address impairment for bacteria (Refer to the MS4 General Permit TXR040000; Part II Section D.4.(a)(5)):

Description of bacteria-focused BMP	Comments/Discussion
<b>TMDL I-Plans:</b> Comply with existing implementation plans for discharges to impaired water bodies for which there is a TCEQ and EPA approved TMDL.	Compliance evaluation was completed during current reporting period. Permittees are in 100% compliance with the applicable TMDL I-Plan.
<b>Failing On-Site Sewer Systems:</b> Identification of failing on-site sewer systems through complaints and/or visual inspections of the storm sewer system. Identified discharges from failing on-site sewer systems will be addressed as illicit discharges to the MS4 through the operator's legal authority.	0 illicit discharges were found as a result of failing on-site sewer systems.
<b>Promote Proper Maintenance of On-Site Sewer Systems:</b> Develop media to facilitate proper maintenance of on-site sewer systems. Educational materials may include brochures, websites, and/or social media pages.	2 types of brochures and a stormwater quality website that help facilitate proper maintenance of on-site sewer systems were developed and made available during the reporting period.
<b>MS4 Outfall Inspections:</b> Utilize reports from MS4 field staff, citizens, and a concentrated dry weather screening program to inspect outfalls for illicit discharges.	20% of identified outfalls were inspected during reporting period

Description of bacteria-focused BMP	Comments/Discussion
<p><b>Public Reporting:</b> Develop media targeting the pollutant(s) of concern to facilitate public reporting sanitary sewer overflows, failing on-site sewer systems, illicit discharges and/or other pollutant sources. Educational materials may include stormwater hotlines, brochures, websites, and/or social media pages.</p>	<p>2 types of brochures and a stormwater quality website that help facilitate public reporting of the pollutant(s) of concern were developed and made available</p>
<p><b>Pet Waste Management:</b> Develop media to facilitate and promote proper pet waste management practices. Educational materials may include flyers/brochures, websites, and/or social media pages.</p>	<p>Brochure promoting proper pet waste management was developed and made available</p>
<p><b>Animal Shelters, Zoos and/or Horse Stables:</b> Develop pollution prevention guidelines for municipally owned animal shelters, zoos and/or horse stables. Conduct employee training and implement control measures focused on the reduction of pollutant(s) of concern from municipally owned animal shelters, zoos and/or horse stables.</p>	<p>Pollution prevention plans have been developed for municipal facilities and employee training was conducted on 5/11/2017.</p>

6. Assess the progress to determine BMP's effectiveness in achieving the benchmark (Refer to the MS4 General Permit TXR040000; Part II.D.4.(a)(6)):

Benchmark Indicator	Description/Comments
Number of sources identified or eliminated	Dry weather outfall screening was conducted on approximately 20% of identified outfalls; there were 0 illicit discharges found.
Number of education materials developed	2 types of brochures, 1 flyer, and a stormwater quality website that address bacteria sources were developed and made available

**The permittees assess progress in achieving benchmarks and determining the effectiveness of BMPs by evaluating program implementation measures. The following indicators are utilized to assess progress towards the benchmark(s): the number of illicit discharge sources identified or eliminated, number of public education opportunities conducted, number of lift stations inspected, number of sanitary sewer improvement projects, and results of dry weather screening activities. After review, the permittees have maintained 100% compliance with the measurable goals and implementation schedule established in their SWMP and believe the continued implementation of these focused BMPs will continue to make progress towards the desired benchmark value.**

### E. Stormwater Activities

Describe stormwater activities the MS4 operator plans to undertake during the next reporting year. You may use the table below (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(d)):

MCM(s)	BMP	Stormwater Activity	Description/Comments
1	Flyers and Brochures	Distribute or post at least 2 types of available brochures per year	Distribution or posting of flyers and brochures for the purpose of educating the public on stormwater impacts and ways they can minimize stormwater pollution

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
1	Develop Materials for Local Schools/Libraries	Ensure at least 1 type of material is distributed annually for local schools and/or public libraries	Development of educational materials for school age children in order to foster an early age respect for water quality
1	Education of Construction Site Personnel	Make available to construction site personnel at least 1 guidance document, brochure, or webpage on construction site runoff issues each year	Development of guidance materials/brochures/webpage for construction site personnel on the proper installation and maintenance of erosion and sediment controls, and other construction site runoff issues
1	Public Service Announcements	Provide at least 1 PSA to be aired by local media, public access channel, or website at least once per permit term	Develop and make available PSAs on the impacts of stormwater pollution and steps that residents can take to improve water quality
1	Storm Drain Marking	Mark new storm drains developed during the permit term and maintain existing markers as needed	Paint or epoxy storm drain markers on permanent stormwater inlets in new developments



<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
1	Stormwater Quality Website	Update website at least once per permit term	Develop and maintain a stormwater quality website. The website will include stormwater education per the TCEQ general permit guidelines and provide specific information regarding the TPDES Phase II MS4 program; including links to other local, state and national stormwater websites. In addition, the website will provide viewers with instructions on how to report stormwater quality concerns in their area.
1	SWMP Availability	Make SWMP available to the public annually	Make the SWMP available to the public on the stormwater quality website. Website address will be included on flyers and brochures distributed by the permittee.
1	SWMP Committee	Conduct at least 2 SWMP Committee meeting per year and encourage local groups to participate at least once per permit term	Formation/maintenance of a committee on SWMP program development and implementation
1	Stormwater Hotline	Distribute at least 2 types of materials per year that informs the public about report stormwater quality concerns.	Advertise appropriate phone numbers for citizens to report information regarding illicit discharges, illegal dumping, construction site discharges, etc.
2	MS4 Outfall Inspections	Inspect approximately 20% of the identified outfalls per year	Utilize reports from MS4 field staff, citizens, and a concentrated dry weather screening program to inspect outfalls for illicit discharges

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
2	Regulatory Mechanisms	Enforce the local illicit discharge regulations as needed	Enforce local illicit discharge regulations prohibiting illicit non-storm water discharges from being discharged into the MS4.
2	Public Reporting	Distribute at least 2 types of media/materials to help facilitate public reporting of illicit discharges	Develop media to facilitate public reporting of illicit discharges. Options may include stormwater hotlines, websites, and social media pages.
3	Construction Site Plan Review	Review applicable construction site plans for compliance with local regulatory mechanisms	Implement a construction site plan review program that focuses on compliance with the local construction regulations and water quality impacts and develop associated guidance materials
3	Construction Site Inspection/Enforcement	Inspect 50% of applicable construction sites per year, or a minimum of 30 inspections	Conduct inspections of construction sites/associated control measures and enforce local regulatory mechanisms to the MEP. Notify site operators of their requirement to obtain TPDES permit coverage.
3	Regulatory Mechanisms	Enforce local construction regulations as needed.	Enforce local stormwater runoff control regulations to address stormwater runoff from construction sites which disturb one acre or more or are part of a common plan of development that disturb greater than or equal to one acre.
3	Construction Site Notice Posting	Post an appropriate site notice at each permittee owned construction site subject to the TPDES Construction General Permit TXR150000	Post an appropriate site notice or NOI in a publicly accessible location for each permittee owned construction project subject to the TCEQ Construction General Permit

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
3	Public Reporting	Develop and implement procedures for receipt and consideration of information submitted by the public regarding construction site stormwater runoff.	Implement standard operating procedures for public reporting regarding construction site stormwater runoff. SOP was developed in Year 2 (2015).
4	Development Project Plan Review	Review construction plans for the inclusion of appropriate post-construction controls	Review development plans to ensure compliance with permittee post-construction runoff guidelines and inclusion of appropriate permanent stormwater quality controls. Ensure that operators design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality.
4	Regulatory Mechanisms	Enforce the local post construction site runoff regulations	Enforce local post construction stormwater management regulations to address discharges from new development and redevelopment projects which disturb one acre or more or are part of a common plan of development that disturb greater than or equal to one acre. Document and maintain all associated enforcement actions.
5	MS4 Facility Inventory	Develop and maintain MS4 facility inventory list and stormwater controls within the regulated area	Maintain an inventory of the applicable MS4's facilities and stormwater controls within the regulated area

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
5	Disposal of Waste	Properly dispose of waste materials on a routine basis and maintain documentation regarding disposal procedures	Properly dispose of waste materials that are removed as a result of maintenance activities; such as floatables, dredge spoils, and or accumulated sediments
5	Vehicle and Equipment Maintenance	Conduct routine maintenance and repairs on permittee owned equipment	Conduct routine maintenance of permittee owned vehicles according to manufacturer's specifications
5	Litter/Garbage Collection	Conduct litter/garbage collection at least once per year within the regulated area	Conduct garbage and/or litter collection in order to reduce floatable material discharges to stormwater
5	Maintain Municipally Owned Construction Sites	Inspect and maintain permittee owned construction sites as required by the TCEQ Construction General Permit	Conduct maintenance activities necessary to properly maintain erosion and sediment controls at municipally owned construction sites based on needs identified during construction site inspections
5	Permittee Parking Lots	Inspect/maintain permittee parking areas at least once per year	Inspect and maintain municipal parking lots

**F. SWMP Modifications**

1. 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 **X** No

If ‘Yes’, report on changes made to measurable goals and BMPs (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(e)): **N/A**

<b>MCM(s)</b>	<b>Measurable Goal(s) or BMP(s)</b>	<b>Implemented or Proposed Changes (Submit NOC as needed)</b>
<b><u>N/A</u></b>	<b><u>N/A</u></b>	<b><u>N/A</u></b>

**Note:** If changes include additions or substitutions of BMPs, include a written analysis explaining why the original BMP is ineffective or not feasible and why the replacement BMP is expected to achieve the goals of the original BMP.

2. Explain additional changes or proposed changes not previously mentioned (i.e. dates, contacts, procedures, annexation of land etc.): **N/A**

**G. Additional BMPs for TMDLs and I-Plans**

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans (Refer to the MS4 General permit TXR040000 Part IV Section B.2.(f)). **N/A**

<b>BMP</b>	<b>Description</b>	<b>Implementation Schedule (Start Date etc.)</b>	<b>Status / Completion Date (completed, in progress, not started)</b>
<b><u>N/A</u></b>	<b><u>N/A</u></b>	<b><u>N/A</u></b>	<b><u>N/A</u></b>

## H. Additional Information

1. Is the permittee relying on another entity to satisfy some of its permit obligations? (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(g))

Yes  No

If "Yes," provide the name(s) of other entities and an explanation of their responsibilities (add more spaces or pages if needed):

Name and Explanation: **Orange County Drainage District; see explanation below**

Name and Explanation: **City of Vidor; see explanation below**

Name and Explanation: **City of Bridge City; see explanation below**

Name and Explanation: **City of Orange; see explanation below**

Name and Explanation: **City of Pinehurst; see explanation below**

Name and Explanation: **City of West Orange; see explanation below**

**All permittees listed in this annual report are participating members in the Orange County Stormwater Quality Coalition and are responsible for the implementation of the programs as indicated in the "Responsible Party" section of the SWMP. Some of the activities are being conducted as a group, such as the development of public education materials, guidance documents, standard operating procedures, and SWMP meetings.**

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

Yes  No

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

Yes  No

Authorization Number: **TXR040030** Permittee: **Orange County**

Authorization Number: **TXR040029** Permittee: **Orange County Drainage District**

Authorization Number: **TXR040028** Permittee: **City of Vidor**

Authorization Number: **TXR040429** Permittee: **City of Bridge City (New Permittee)**

Authorization Number: **TXR040430** Permittee: **City of Orange (New Permittee)**

Authorization Number: **TXR040428** Permittee: **City of Pinehurst (New Permittee)**

Authorization Number: **TXR040431** Permittee: **City of West Orange (New Permittee)**

## I. Construction Activities

1. The number of construction activities that occurred in the jurisdictional area of the MS4 (Notices of intent and site notices received; Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(h)) 42

2a. Does the permittee utilize the optional 7<sup>th</sup> MCM related to construction?

Yes  No

2b. If 'yes,' then provide the following information for this permit year (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(i)):

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

**Note:** Though the seventh MCM is optional, implementation must be requested on the NOI or on a NOC and approved by the TCEQ.



**J. Certification – Orange County Drainage District**

*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 persons 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 (printed): Don Carona Title: General Manager  
Signature: Don Carona Date: 11/27/2018

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – City of Vidor

*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 persons 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.*

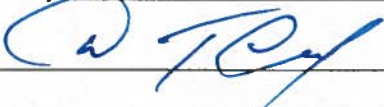
Name (printed): MICHAEL KUNST Title: CITY MANAGER  
Signature:  Date: 11-28-2018

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – Orange County

*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 persons 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 (printed): Dean T. Crooks Title: Orange County Judge

Signature:  Date: December 4, 2018

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – City of Bridge City

*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 persons 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.*

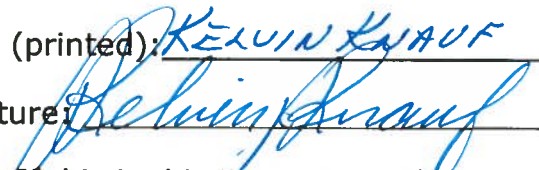
Name (printed): J. SCOTT D. JONES Title: CITY MANAGER

Signature:  Date: 11/21/18

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – City of Orange


*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 persons 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 (printed): KELVIN KNAUF Title: INTERIM CITY MANAGER  
Signature:  Date: 11/26/18

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – City of Pinehurst

*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 persons 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 (printed): Robbie L. Hoach Title: City Administrator  
Signature:  Date: 11-26-18

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

## J. Certification – City of West Orange

*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 persons 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 (printed): Roy McDonald Title: Mayor

Signature: Roy McDonald Date: November 26, 2018

**Note:** If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).