City of New Braunfels

December 19, 2017

CERTIFIED MAIL – 7016 0600 0000 4669 9033
RETURN RECIEPT REQUESTED

Texas Commission on Environmental Quality
Team Leader
Stormwater & Pretreatment Team (MC-148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: Phase II MS4 Annual Report Transmittal for the City of New Braunfels
TPDES Permit Authorization: **TXR040469**

Dear Team Leader:

This letter serves to transmit the required annual report for the Texas Pollutant Discharge Elimination System Small Municipal Separate Storm Sewer System General Permit, Authorization Number TXR040469 for the City of New Braunfels.

The annual report is for Year 3 with the reporting period beginning October 1st, 2016 and ending September 30th, 2017.

A separate Notice of Change has not been submitted based on the fact that changes have not been proposed for the next permit year.

As required by the general permit, a copy of this submittal has also been mailed to the TCEQ's Regional Office 13 in San Antonio, Texas.

If you have any questions please contact Mark Enders, Watershed Program Manager, at (830) 221-4639.

Sincerely,

Greg Malatek, PE
Director of Public Works
City of New Braunfels

TEL 830.221.4020
FAX 830.626.3600
www.nbtexas.org
550 LANDA STREET
NEW BRAUNFELS, TEXAS 78130

City of New Braunfels

December 19, 2017

CERTIFIED MAIL – 7016 0600 0000 4669 9026
RETURN RECIEPT REQUESTED

Texas Commission on Environmental Quality
Water Quality-Region 13
14250 Judson Rd
San Antonio, TX 78233-4480

Re: Phase II MS4 Annual Report Transmittal for the City of New Braunfels
TPDES Permit Authorization: **TXR040469**

Dear Water Quality Section Manager:

This letter serves to transmit the required annual report for the Texas Pollutant Discharge Elimination System Small Municipal Separate Storm Sewer System General Permit, Authorization Number TXR040469 for the City of New Braunfels.

The annual report is for Year 3 with the reporting period beginning October 1st, 2016 and ending September 30th, 2017.

A separate Notice of Change has not been submitted based on the fact that changes have not been proposed for the next permit year.

As required by the general permit, a copy of this submittal has also been mailed TCEQ's Central Texas Area office in Austin, Texas.

If you have any questions please contact Mark Enders, Watershed Program Manager, at (830) 221-4639.

Sincerely,

Greg Malatek, PE
Director of Public Works
City of New Braunfels

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NEW BRAUNFELS, TEXAS 78130

Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040469
Reporting Year: 3
Annual Reporting Year Option Selected by MS4: Fiscal Year
Fiscal Year: 2016/2017, Last day of fiscal year: September 30th
Reporting period beginning date: October 1st, 2016
Reporting period end date: September 30th, 2017

MS4 Operator Level: Level 3 Name of MS4: City of New Braunfels

Contact Name: Greg Malatek Telephone Number: (830) 221-4020

Mailing Address: 550 Landa Street, New Braunfels, TX 78130

E-mail Address: gmalatek@nbtexas.org

A copy of the annual report was submitted to the TCEQ Region YES **X** NO____
(Region the annual report was submitted: TCEQ Region 13)

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: Public Education, Outreach and Involvement	Stormwater Educational Materials and Strategies	Yes, stormwater educational materials and presentations disseminate stormwater information to the public and help to develop local awareness of pollution prevention.
1: Public Education, Outreach and Involvement	Initiate Public Participation and Involvement Program	Yes, involving the public in watershed planning and stormwater pollution prevention promotes and encourages public awareness and participation and allows citizens to take ownership of stormwater pollution prevention and watershed management.
1: Public Education, Outreach and Involvement	Partnerships with Other Institutions and Organizations	Yes, collaboration with other organizations helps to increase the public awareness of stormwater pollution prevention and potential water quality issues. Partner organizations aid in educating the public on watershed management initiatives while promoting regional participation in protecting water quality.
1: Public Education, Outreach and Involvement	Presentation to Local Elementary Schools	Yes, it is imperative that school-aged children and students are informed of water quality issues and stormwater pollution prevention. Increased awareness stormwater pollution and water resources will help to improve and protect water quality.
1: Public Education, Outreach and Involvement	Volunteer Program	Yes, volunteer clean-up activities promote the importance of maintaining water quality and litter-free riparian areas as well as offering volunteers a hands-on opportunity and the ability to ask questions and learn more about pollution prevention.
1: Public Education, Outreach and Involvement	Community Arbor Day Program	Yes, the City of New Braunfels Arbor Day event aids in educating residents on the importance of trees and promotes community involvement in protecting water quality.
2: Illicit Discharge Detection and Elimination	Storm Sewer Mapping	Yes, the comprehensive storm drain system map identifies drainage inlets, channels, retention basins, and outfalls. The storm drain system map aids in the implementation of IDDE inspections as well as the tracking and identifying potential illicit discharges.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
2: Illicit Discharge Detection and Elimination	Detection and Elimination Program	Yes, the City's IDDE program, including dry weather screening, aids in identifying and eliminating illicit discharges. The IDDE program allows for identification and tracking of potential illicit discharges, furthering pollution prevention efforts.
2: Illicit Discharge Detection and Elimination	Field Staff Training	Yes, increasing field staff awareness enhances the ability of staff to detect, eliminate, and respond to illicit discharges.
2: Illicit Discharge Detection and Elimination	Public Reporting of Illicit Discharges and Spills	Yes, the ability to receive reports from the public increases the probability of discovering illicit discharges and speeds up the elimination the discharge.
2: Illicit Discharge Detection and Elimination	Illicit Discharge Ordinance	Yes, the City's illicit discharge ordinance provides the City with the legal authority to prohibit and eliminate illicit discharges and connections, reducing the amount of pollutants entering stormwater.
2: Illicit Discharge Detection and Elimination	River Clean-up	Yes, river clean-up events and regularly scheduled riparian maintenance remove trash and other pollutants from watershed areas, reducing the amount of litter and debris reaching waterways.
3: Construction Site Stormwater Runoff Control	Construction Site Inspection Program	Yes, inspection of active construction sites helps identify issues and ensures that adequate erosion, sediment, pollution controls and other SWPPP activities are in place and functioning, thereby reducing the potential for sediment and pollutant discharges.
3: Construction Site Stormwater Runoff Control	Construction Site Inventory	Yes, an inventory of active sites is imperative to guide and prioritize routine stormwater management inspections aimed at preventing the discharge of pollutants associated with construction activities.
3: Construction Site Stormwater Runoff Control	Construction Site Waste Control Ordinance	Yes, the City's construction site waste control ordinance allows the City to effectively prohibit the discharge of pollution by holding construction contractors and operators accountable for proper disposal of construction waste materials.
3: Construction Site Stormwater Runoff Control	Construction Site Runoff Control Ordinance	Yes, the City's construction stormwater management ordinance gives the City legal authority to require inspections, SWPPPs, and adequate erosion and sediment control measures at active construction sites.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
4: Post-Construction Stormwater Mgmt in New Development	Staff Training on Post-Construction Stormwater Mgmt Structures	Yes, training increases staff's knowledge of proper maintenance and functionality of structural stormwater quality controls, bettering the potential to remove pollutants from stormwater.
4: Post-Construction Stormwater Mgmt in New Development	Post-Construction Development Review Procedures	Yes, the revision of the City's Drainage and Erosion Control Design Manual includes requirements for the installation of water quality controls in areas of new development and re-development. The water quality controls will result in improved quality of stormwater runoff in areas of new development.
4: Post-Construction Stormwater Mgmt in New Development	Long-Term Operation and Maintenance	Yes, inspections of water quality controls ensure proper operation and functionality of the controls. The formal inspection program assists in identifying problems associated with the systems and ensures effectiveness of the BMPs.
4: Post-Construction Stormwater Mgmt in New Development	Post-Construction Stormwater Management Ordinance	Yes, adoption of an ordinance and the City's Drainage and Erosion Control Design Manual effectively requires stormwater controls in areas of new development and re-development. The ordinance ensures proper monitoring and maintenance of the controls to ensure operability and effective pollution prevention.
4: Post-Construction Stormwater Mgmt in New Development	Encouragement of Low-Impact Development (LID) Design	Yes, the City's Low Impact Development Manual includes guidelines for design engineers to use in the development and design of projects. Implementation of LID projects will help in cleaning stormwater runoff and will ultimately benefit water quality.
4: Post-Construction Stormwater Mgmt in New Development	Establishment of Riparian Zones	Yes, healthy riparian zones help to filter out and remove potential pollutants from stormwater runoff.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Street Sweeping	Yes, the City street sweeping program results in the removal of sediment, debris, and metals that otherwise have the potential to be mobilized and transported in stormwater runoff. The prioritization of street sweeping locations allows for efficiency in removing potential pollutants.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Mapping of Facilities and Inventory Control	Yes, a map of city-owned facilities aids in identifying the location of these facilities and their proximity to surface waters and stormwater conveyances, allowing city staff to prioritize inspections.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Municipal Operations and Facility Survey	Yes, facility surveys provide accurate information regarding the operations conducted, materials stored, and the potential for pollutant discharges at each City facility. Surveys allow the City to evaluate and implement stormwater BMPs as appropriate.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Facility Inspection Program	Yes, routine inspections of City-owned facilities allow City staff to identify stormwater control measures that may be required to prevent pollutant discharges. All facilities identified as "high priority" areas store chemicals or are immediately adjacent to waterways. This distinction allows for efficiency in minimizing pollutant discharge.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Outdoor Storage	Yes, identification and assessment of outdoor storage facilities ensures that materials are stored in a manner that prevents pollutant releases. A complete inventory allows the City to asses storage adequacy and develop protection measures.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Fleet and Equipment Maintenance	Yes, routine inspection of the fleet maintenance facility ensures that good housekeeping, spill prevention, and protection measures are being implemented.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Vehicle and Equipment Washing	Yes, routine assessment of vehicle and equipment washing operations ensures that good housekeeping, spill prevention, and protection measures are being implemented.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Landscaping	Yes, good landscaping practices minimize the potential for pesticides, herbicides, fertilizer, and lawn trimmings to enter the storm drain system and/ or surface waters. The proper use and storage of landscaping materials also minimizes the potential for pollutant discharges.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Structural Control Maintenance	Yes, the updated inventory and on-going inspections of City-owned structural stormwater controls aids in the identification of controls requiring maintenance and allows for effectively minimizing pollutants in our stormwater.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Spill Prevention and Response	Yes, readily available spill kits and trained staff ensure that spills are quickly cleaned thus minimizing the potential for discharges to surface waters and the storm drain system.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Employee Training Program	Yes, the increased awareness of water quality issues and pollution prevention by City employees ensures that stormwater quality programs are properly implemented and BMPs are maintained.
5: Pollution Prevention & Good Housekeeping for Municipal Operations	Green Waste Management	Yes, the green waste recycling program helps to keep lawn clippings and other green waste from entering the storm drain system and surface waters.

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**):

MCM	BMP	Information Used	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)
2	IDDE program dry weather screening	Stormwater Outfalls	Inspections	Yes, once an illicit discharge is observed, immediate action is taken to track the source, eliminate the discharge and remediate the pollution.
3	Construction site inspections	Observations at active construction sites	Inspections	Yes, inspection of active construction sites allows City staff to assess sites for adequate stormwater pollution prevention controls. Sites with inadequate controls are required to repair and/ or install additional controls which helps to minimize sediment and construction-related pollutant discharges.
4	Post-construction BMP inspections	Post-construction BMPs	Inspections	Yes, inspection of permanent stormwater controls ensures proper operation and functionality of the controls, therefore effectively reducing pollutant discharges.
5	Stormwater drainage system inspections	Stormwater structures	Inspections	Yes, the City's Streets and Drainage crews inspect stormwater structures, including drainage inlets and channels, to remove blockages, look for signs of dumping and assess for any other potential issues.

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):**

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1	Update City Website, local utility billing mail-outs, and media outlets (PE-1)	Met goal. The MS4 Stormwater webpage on the City's Watershed Management Division website (www.nbtexas.org/watershed) remains active and was updated in Year 3. The page includes information on the City's MS4 program, links to the City's Stormwater Management Program (SWMP) document, and a link to the City's Stormwater fact sheet. The City publishes a quarterly newsletter titled "Making the Most of Our Resources" which is included in publications of the local newspaper, the Herald-Zeitung. The Winter 2017, Spring 2017, and Fall 2017 editions include information regarding stormwater pollution prevention, littering and illicit discharge detection. 10,000 copies of the Winter 2017, Spring 2017, and Fall 2017 newsletters were included as inserts in the Herald-Zeitung.
1	Record the number of education events and meetings conducted (PE-1)	Met goal. Three events were held in Year 3 at which the City distributed stormwater pollution prevention information to the public.
1	Develop a stormwater fact sheet (PE-1)	Met goal. The Stormwater Fact Sheet was developed in Year 1. The fact sheet was evaluated and reviewed in Year 3. It remains posted on the City's Watershed Management webpage.
1	Develop stormwater brochures (PE-1)	Met goal. A stormwater brochure was developed in Year 1 and was distributed at City events in Years 2 and 3. The stormwater brochure was evaluated and reviewed in Year 3.
1	Events and meetings conducted with citizen watch groups (PE-2)	Met goal. The City collaborated with Texas A&M AgriLife to host a Watershed Steward workshop on February 7, 2017 that was attended by many citizens active in watch groups. The City attended meetings with Meadow Center Texas Stream Team staff and presented to the Friends of Landa Park in FY16/17.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1	Record and document WQ pollution and illegal dumping incidents reported by citizens (PE-2)	Met goal. Nine (9) water quality concerns were received by citizens in Year 3. Each of these concerns were inspected, documented, and followed up on.
1	Sponsor, co-sponsor, or participate in annual stream clean-up events (PE-2)	Met goal. The City co-sponsored the 5th Annual Geronimo and Alligator Creek Clean-Up event held on April 8th, 2017. The City provided roll-off trash dumpsters for the event. City staff volunteered and participated in the event. The City hosted a GBRA employee volunteer day on April 28, 2017. Volunteers assisted with litter clean-up along the Dry Comal Creek. The City hosted the First Annual Dos Rios Watershed Clean-Up event on September 16, 2017. Approximately 150 volunteers collected litter at 10 locations along rivers and creeks in New Braunfels. 1,700 lbs of trash, 12 tires, and 10 lbs of recyclables were collected and disposed of.
1	Collaborate with watershed-based organizations (PE-3)	Met goal. The City continued to work with watershed-based organizations in Year 3. The City collaborated with the Texas Stream Team and the Alligator Geronimo Creek Watershed Partnership in Year 3. The City continued its participation in the Edwards Aquifer Habitat Conservation Plan program and continued to work with the Guadalupe Blanco River Authority. The City also regularly attended and presented at Chamber of Commerce Natural Resource Committee meetings. The City collaborated with MS4 Stormwater Management personnel from the City of Kyle, City of San Marcos, and Texas State University. Meetings were held every other week in an effort to combine efforts, share experiences, and provide support within the group to improve each entity's MS4 program.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1	Perform watershed and stormwater educational presentations to local schools. Record number of presentations and participants (PE-4)	Met goal. City staff presented stormwater pollution prevention information to students at the New Braunfels Middle School and Oak Creek Elementary School in Year 3. City staff spoke with six science classes (approx. 150 students) at New Braunfels Middle School on April 4, 2017 and participated at the Earth Day event at Oak Creek Elementary School on April 21, 2017.
1	Coordinate the activities for a volunteer event at local parks. (PE-5)	Met goal. The City coordinated the First Annual Dos Rios Watershed Clean-Up event that took place on September 16, 2017. The event included clean-up at City parks.
1	Annually sponsor an Arbor Day/ reforestation event. (PE-6)	Met goal. The City's annual Arbor Day event was held on October 22, 2016 in Landa Park. A tree planting demonstration led by Mark Kroeze, Regional Urban Forester for Texas A&M Forest Service was given, and 850 one-gallon containerized trees of 13 different species were given away to community members.
2	Develop MS4 Outfall Map (ID-1)	Met goal. A comprehensive MS4 system map was completed in Year 2 and was continuously updated throughout Year 3 with new stormwater infrastructure. The map includes outfalls, drainage channels, retention ponds, and drainage inlets within City limits. All collected field data was updated to the City's GIS server and is included in an ArcGIS map. The map is used to guide the IDDE Dry Weather Screening program and the post-construction water quality BMP inspection program.
2	Develop policies and procedures to ensure GIS data is acquired for new development (ID-1)	Met goal. New infrastructure is continuing to be mapped as the construction of new stormwater infrastructure is completed. The City has developed Standard Operating Procedures (SOP) for mapping new infrastructure.
2	Develop and implement IDDE program (ID-2)	Met goal. In Year 3, the City finalized the development of SOPs for the IDDE program. The City began implementation of the IDDE program in Year 3.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
2	Perform dry weather screening to detect potential illicit discharges (ID-2)	Met goal. The dry weather screening program was implemented in Year 3. 62 priority outfalls were screened during dry weather conditions during the FY 2016/2017 reporting year. City staff has established SOPs that guide the dry weather screening program.
2	Provide illicit discharge detection training to City staff. Report names of and number of attendees. Document training materials (ID-3)	Met goal. An illicit discharge detection, spill prevention and spill response training was given to field staff (22 employees) in the City's Streets and Drainage Department. The sign-in sheet and training materials have been retained.
2	Develop public reporting method for illicit discharges, spills, and water quality complaints. (ID-4)	Met goal. An on-line water quality and spill reporting form has been developed and is included on the City's Watershed Management website (www.nbtexas.org/watershed). An SOP has also been developed for handling water quality concerns that are called into the City, including documentation of any report and corrective action.
2	Develop and implement illicit discharge ordinance (ID-5)	Met goal. An illicit discharge ordinance has been enacted and adopted into the City's Code of Ordinances (Section 143-6). The illicit discharge ordinance was implemented in year 3, resulting in the issuance of 2 Notice of Violations. Other identified illicit discharges were eliminated by responsible parties upon notification by the City and prior to the need for further enforcement.
2	Record and report on trash collection operations and river clean-ups (ID-6)	Met goal. The City continues to uphold two contracts for litter clean-up activities. The first contract includes litter clean-up activities at four City parks located along the Guadalupe and Comal rivers (Landa Park, Hinman Island Park, River Acres Park, and Prince Solms Park) between February and September of each year. The second contract involves weekly litter and trash clean-up within and along the banks the Comal and Guadalupe Rivers within City limits between March and October.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
3	Develop construction site inspection procedures and forms (CS-1)	Met goal. The City has established SOPs that guide construction stormwater management inspections. A standardized field inspection report is utilized to record inspection findings. All inspection records are retained on the City's server.
3	Perform construction stormwater management inspections at active construction site(CS-1)	Met goal. City staff conducted routine stormwater management inspections at active construction sites throughout Year 3. 427 construction stormwater inspections were conducted between Oct 1st, 2016 and Sept 30th, 2017.
3	Provide annual training to applicable City employees (CS-1)	Met goal. City staff attended several construction stormwater management trainings in Year 3. Watershed Program staff led a lunch and learn for Engineering Inspectors to educate and discuss construction stormwater management and inspection expectations. Watershed Program staff (2) attended the 2017 Environmental Trade Fair and Conference on May 16-17, 2017 which included educational sessions on construction stormwater management. Watershed and Engineering Staff (3) attended the 2017 EPA Stormwater Conference on September 18-21, 2017 which featured training sessions and presentations regarding stormwater management and state and nationwide regulations. The City continued to build capacity of City inspectors to evaluate construction sites for effective stormwater controls.
3	Compile, document, and report construction site inventory. Report number of construction stormwater permits and NOIs (CS-2)	Met goal. City staff continues to document Notice of Intents (NOIs) and Construction Site Notices (CSNs) associated with the TCEQ TXR150000 permit that are received by the City. In permit Year 3, the City received 35 NOIs and CSNs for construction projects within City limits. Permit records from the City's Engineering and Building Departments are also used to identify and document active construction projects. Active sites are also identified and documented during routine field visits. All active construction sites >1 acre are tracked in a comprehensive site inventory that is used to guide routine inspections.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
3	Develop and document procedures for tracking and documenting construction site inventory (CS-2)	Met goal. Procedures for receiving, documenting, and tracking active construction projects have been developed. This includes documenting all construction sites on a master spreadsheet where City Staff records permit number, permit holder, contact information and other pertinent site information.
3	Develop and adopt construction site waste control ordinance. (CS-3)	Met goal. A construction waste ordinance was developed in Year 2. The draft ordinance was presented to the City of New Braunfels Watershed Advisory Committee and Planning Commission for review and endorsement. The ordinance (No. 2016-74) was approved by City Council on December 12th, 2016 and adopted to the City's Code of Ordinances (Section 143-7).
3	Develop and adopt construction site runoff control ordinance. (CS-4)	Met goal. A construction site runoff control ordinance was developed in Year 2. The draft ordinance was presented to the City of New Braunfels Watershed Advisory Committee and Planning Commission for review and endorsement. The ordinance (No. 2016-74) was approved by City Council on December 12th, 2016 and adopted to the City's Code of Ordinances (Section 143-7). The construction site runoff control ordinance was implemented in Year 3, resulting in 7 Notice of Violation citations. Other identified construction stormwater management issues were corrected by responsible parties upon notification by the City and prior to the need for further enforcement.
4	Staff Training on Post-Construction Stormwater Controls (PC-1)	Met goal. The City contracted with a consultant to provide a half-day training for City staff on the construction, maintenance and inspection of post-construction stormwater controls. The training was held on March 28th, 2017. Attendees included City staff for the Engineering Dept, Watershed Mgmt Division, Planning Department, and construction inspectors. Watershed Program staff (2) attended the 2017 Environmental Trade Fair and Conference on May 16-17, 2017 which included educational sessions on LID, green infrastructure and permanent water quality BMPs.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
4	Review and revise water quality protection measures as part of the City's Drainage Criteria Manual (DCM). Implement revised DCM (PC-2)	Met goal. The City's Drainage and Erosion Control Design Manual (DCM) was finalized and adopted in Year 2. The new DCM became effective on July 1, 2016. The DCM includes water quality control requirements for areas of new development. The water quality control requirements took effect on January 1, 2017, requiring that any new Type 3 development (adding >5,000 sq. ft of new impervious cover) platted after the effective date implement permanent water quality controls to treat the first ½" of runoff. The City contracted with a consultant to lead a 2-hour training for local design engineers and City staff on the proper design of permanent water quality BMPs. The training was held on Sept 11th, 2017.
4	Develop and implement program to inspect post-construction control measures/ BMPs (PC-3)	Met goal. Inspections of post-construction control measures began in Year 3. As of January 1, 2017, new Type 3 development and redevelopment requires permanent water quality controls. Standard Operating Procedures were developed for post-construction BMP inspections. A master list of permanent stormwater controls within city limits and a field report have been developed to guide inspections. 11 post-construction BMP inspections were performed in Year 3.
4	Develop Post-Construction Stormwater Management Ordinance. Adopt, post, and implement ordinance (PC-4)	Met goal. A post-construction stormwater management ordinance was developed in Year 2. The draft ordinance was presented to the City of New Braunfels Watershed Advisory Committee and Planning Commission for review and endorsement. The ordinance (No. 2016-74) was approved by City Council on December 12th, 2016 and adopted to the City's Code of Ordinances (Section 143-8). Post-construction stormwater inspections were completed in Year 3. The adopted ordinance requires inspection and maintenance of permanent stormwater controls which allows City Staff to hold owners accountable for maintenance of post-construction controls.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
4	Review and revise existing Low Impact Development (LID) stormwater design guidelines. Include LID guidelines as part of the City's Drainage Criteria Manual (DCM) (PC-5)	Met goal. A LID Manual was completed as a supplement to the DCM. The LID Manual provides guidelines and LID features that developers may incorporate into their projects. The LID Manual was adopted on April 11, 2016. The City contracted with a consultant to lead a training for local design engineers and City staff on the proper design of LID stormwater controls and permanent water quality BMPs. The training was held on Sept 11th, 2017. The City developed a Water Quality Protection Plan (WQPP) in 2017 as part of the Edwards Aquifer Habitat Conservation Plan (EAHCP). The WQPP includes an analysis of potential LID projects that can be implemented in the Comal River watershed in future years as part of the EAHCP. Funding was secured in 2017 through the EAHCP to implement LID projects in 2018.
4	Evaluate need for establishment of additional riparian zone establishment in flood zones. Implement policies for establishing riparian zones (PC-6)	Met goal. The City maintains riparian buffers (no mow-zones) along specific portions of the Comal River, Dry Comal Creek, and Guadalupe River on City-owned properties (i.e. City parks and flood properties). The revised Drainage and Erosion Control Design Criteria Manual (DCM) includes Low Impact Development (LID) design guidelines that include recommendations for the establishment of riparian buffers in areas of new development. The DCM also includes streambank erosion setback standards that will reduce stream degradation caused by erosion of the streambank. A public planning process was initiated in Year 2 to determine the future of previously flooded properties along the Guadalupe River. The flood properties were acquired by the City. A River Properties Vision Plan was presented and approved by the Parks and Recreation Advisory Board and City Council on March 27, 2017. The plan includes the establishment of a low intensity park with expanded riparian buffer areas. Additional no mow-zones were established in Year 3 along the Comal River, specifically along portions of the Old Channel that runs through portions of the Landa Park Golf Course. In addition, efforts have been made to remove non-native riparian plant species and expand riparian buffer areas using native plants.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
5	Review and revise, as needed, existing street sweeping operations and procedures. Investigate opportunities to increase the effectiveness of the program to reduce pollutants (GH-1)	Met goal. The City's street sweeping program was evaluated again in Year 3. It was determined the City's Street Sweeping program remains effective at removing sediment and debris from City streets, thus preventing them from reaching surface waters. The street sweeping program, including a street sweeping map, has been documented.
5	Develop street sweeper waste disposal program (GH-1)	Met goal. The street sweeping program consists of the following: -The City owns and operates three regenerative-air street sweeping units. Two sweeper units are run 5 hours/ day, 5 days/ week. Priority street sweeping areas have been delineated. The priority streets are those that are located immediately adjacent to surface waters, areas where stormwater runoff drains rapidly to surface waters, or in areas where sediment and debris are known to rapidly accumulate. A map of the priority sweeping areas is retained on-file.
5	Develop a map identifying CONB-owned and operated facilities and stormwater controls (GH-2)	Met goal. An ArcGIS map has been developed to document the locations of all City properties and facilities. A stormwater control map was completed in Year 3 to show City-owned controls.
5	Perform surveys of municipal facilities and operations. (GH-3)	Met goal. Surveys were conducted at all City facilities including Fire facilities, Police Dept facilities, Parks Dept facilities, Streets & Drainage facilities, and Solid Waste facilities. The surveys, including updates and changes to inventories, have been documented and are retained on-file.
5	Implement facility inspection program. (GH-4)	Met goal. Quarterly inspections were performed throughout Year 3 at high-risk City facilities. The inspections were conducted at fire stations (6 facilities), police station, solid waste vehicle storage area, Parks Dept equipment and storage facility, and fleet maintenance shop. Back-up generators are inspected on a monthly basis and are checked for spills and leakage. Any identified issues are followed up on in order minimize the potential for pollutant

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
		discharges. All inspection reports are retained on file.
5	Compile inventory of outdoor storage locations and materials stored. Perform routine inspections of storage facilities (GH-5)	Met goal. Outdoor storage facilities have been assessed and are inspected on a regular basis as part of the facility inspection program.
5	Compile and report vehicle maintenance locations. Perform and document routine inspections (GH-6)	Met goal. The fleet maintenance facilities (2) are inspected on a quarterly basis as part of the facility inspection program.
5	Implement policies and procedures associated with vehicle washing operations to protect WQ (GH-7)	Vehicle wash SOPs have been developed for locations where City vehicles are washed. Most City vehicles are washed at privately-owned commercial car washes negating the need to wash on City property.
5	Landscaping Management (GH-8)	Met goal. The City continues to employ Texas Department of Agriculture (TDA) licensed chemical applicators who are responsible for conducting and/ or overseeing all pesticide, herbicide, and fertilizer applications. Additional City staff members were licensed by TDA as chemical applicators in Year 3. A total of 7 staff members hold TDA chemical applicator licenses. These employees attend regular trainings to maintain credits for their licenses. Landscape chemical applications are done by licensed applicators or under the supervision of licensed applicators as permissible under TDA regulations. All chemical applications and inventories are conducted according to guidelines and regulations set forth by the TDA.
5	Inventory, inspection, and maintenance of City-owned structural controls (GH-9)	Met Goal. The City does not currently own any structural controls such as water quality treatment basins. There are plans to construct structural controls in Year 4. Once completed, City Staff will inspect, maintain, and track its structural controls.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
5	Spill response procedures and clean-up training to applicable City employees (GH-10)	Met goal. Spill prevention and response training was given to field staff (22 employees) in the City's Streets and Drainage Department. Training sign-in sheets and training materials are retained on-file.
5	Provide spill response kits at applicable City facilities (GH-10)	Met goal. Spill response kits were purchased in Year 1 for City facilities and vehicles. Applicable departments still retain an adequate supply of spill kits as of permit Year 3.
5	Provide and document MS4-related training to City staff (GH-11)	In progress. City staff and management is continuing to be educated and informed on stormwater management and water quality initiatives.
5	Record and report the amount of green waste recycled (GH-12)	Met goal. The City continued to implement a green waste recycling program. There was approximately 4,085 tons of green waste diverted from the landfill and sent to Comal County Recycling center to be mulched in permit Year 3.
5	Develop methods to promote green waste recycling and mgmt (GH-12)	Met goal. Green waste recycling is promoted via the City's website and in the "Making the Most of Our Resources" guide which is distributed quarterly as an insert in the local Herald-Zeitung newspaper. The City's green waste webpage includes information on the residential green waste recycling program such as collection requirements, acceptable and prohibited items, and composting information.

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.

The City did not conduct stormwater sampling and monitoring in Year 3.

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 City and its project partners have been working to develop a Watershed Protection Plan (WPP) to addresses the bacteria impairment on the Dry Comal Creek (Segment 1811). A draft of the WPP was submitted to TCEQ for review. The plan identifies management measures for reducing bacteria loading to both the Dry Comal Creek and the Comal River. Stakeholders met multiple times within Year 3 to build consensus on bacteria management strategies. Moving forward, the City will address any comments from TCEQ regarding the WPP and will then submit it to the EPA for final approval. Implementation of the WPP will begin next year.

-The CONB utilized public education to inform residents of proper pet waste management, on-site sewer facility (OSSF) management, and negative impacts of wildlife feeding. Public education efforts associated with reducing bacteria loading consisted of printed brochures, oral presentations, and newspaper inserts.

-Per an existing Sanitary Sewer Overflow (SSO) agreement between New Braunfels Utilities (NBU) and the TCEQ, NBU addressed bacteria loading by implementing several programs to prevent SSOs. These initiatives include: 1) inspections and preventative maintenance for lift stations; 2) annual inspections of high-risk sewer infrastructure; 3) implementation of a Fat, Oil, and Grease (FOG) program; 4) rehabilitation of any defective sewer pipes; 5) increased sewer line inspections.

-The CONB has continued conversations with Texas Parks and Wildlife staff to discuss wildlife management (deer and avian wildlife) in New Braunfels as it relates to bacteria contributions. As part of the WPP, Texas Parks and Wildlife will

continue to partner with the City to educate the public on how overabundant urban wildlife negatively impacts water quality. The City is currently working with TPWD and City Council to discuss urban wildlife management options including the possibility of implementing an ordinance prohibiting the feeding of wildlife.

-The CONB Environmental Services Division, as the authorized agent of Texas Commission on Environmental Quality (TCEQ), currently provides and administers a comprehensive regulatory program for the management of on-site sewage facilities (OSSFs), as prescribed by the Texas Health and Safety Code, Chapter 366. This chapter establishes minimum standards for planning materials, construction, installation, alteration, repair, extension, operation, maintenance, permitting, and inspection of OSSFs.

It is the public policy of the City of New Braunfels and purpose thereof to eliminate and prevent OSSF health hazards by regulating and properly confirming the site and soil conditions, design, construction, installation, operation, and maintenance of OSSF's through permitting of all such systems, technical evaluation of the OSSF's hydraulic characteristic, system testing, and documentation of all aspects of the operational system to ensure compliance with Statute.

As the TCEQ's authorized agent, the City investigates all complaints regarding OSSF's, and takes appropriate and timely action on all documented violations; including reporting such activity to the State on a monthly basis. Appropriate response actions include immediate correction of the identified hazard, in addition to possible criminal or civil enforcement action as necessary, under the authority of ordinance, the Texas Water Code, Chapters 7 and 26, and or the Texas Health and Safety Code, Chapters 341 and 366.

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)):

   Not applicable

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)):

   Not applicable

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)):

   Not applicable

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
Make improvements to reduce sanitary sewer overflows: Inspect high risk sanitary sewer infrastructure	New Braunfels Utilities (NBU) has developed an inspection program for high-risk sewer infrastructure such as aerial crossings and inverted siphons. All high-risk infrastructure is inspected annually.
Make improvements to reduce sanitary sewer overflows: Rehabilitation of defective sanitary sewer piping.	NBU rehabilitated 3,750 feet of pipe and 420 manholes in FY 2017.
Make improvements to reduce sanitary sewer overflows: Inspection of collection system outside of the traditional Edwards Aquifer region.	NBU inspected a total of 475,207 feet of sewer piping in FY 2017 using a combination of CCTV and Sewer Line Rapid Assessment Tool.
Address Lift Station Inadequacies	NBU routinely inspects 24 lift stations several times throughout the year.
Fats, Oil, and Grease (FOG) program	NBU requires that all Food Service Establishments (FSEs) have their grease interceptors pumped and cleaned every 90 days. NBU inspects approximately 50% of all FSEs annually to ensure proper operation and maintenance of grease interceptors. NBU also implements an education program to inform FSE owners and the general public on ways to reduce FOG inputs to the collection system.
Pet Waste Management Education	CONB distributed information regarding pet waste management utilizing brochures, presentations, and newspaper releases. In addition, pet waste collection stations, which include a message regarding proper pet waste disposal, are installed at City parks.

Description of bacteria-focused BMP	Comments/Discussion
On-Site Sewage Facilities and Inspections	CONB investigates all complaints regarding OSSF's, and takes appropriate and timely action on all documented violations and reports such activity to the State on a monthly basis. Appropriate response actions include immediate correction of the identified hazard, in addition to possible criminal or civil enforcement action as necessary.
Animal Sources	CONB has continued conversations with Texas Parks and Wildlife (TPWD) Urban Wildlife staff to discuss overall wildlife management planning in New Braunfels as it relates to bacteria contributions. A City Council workshop on urban wildlife management was held in Year 3 with assistance from TPWD. The workshop informed Council members on the need to manage urban wildlife to mitigate bacteria loading. A wildlife feeding ordinance will be developed and considered for adoption in Year 4. The City's WPP further addresses bacteria loading from animal sources including urban wildlife, and will implement management measures in year 4.
Bacteria Management Education	CONB utilized public education to inform residents of proper pet waste management, on-site sewer facility management, and negative impacts of wildlife feeding. Public education efforts associated with reducing bacteria loading consisted of printed brochures, website, and newspaper inserts. Bacteria management education initiatives are included with Public Education and Outreach measures in MCM-1.

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)): Not applicable

For example, the MS4 may use the following benchmark indicators:

- number of sources identified or eliminated;
- decrease in number of illegal dumping;
- increase in illegal dumping reporting;
- number of educational opportunities conducted;
- reductions in sanitary sewer flows (SSOs)
- increase in illegal discharge detection through dry screening

Benchmark Indicator	Description/Comments
Not applicable	

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
2	ID-2	Illicit Discharge Detection and Elimination (IDDE) Program	The City will continue a program to perform dry weather outfall screening in Year 4 at priority stormwater outfalls. Any observed illicit discharges will be tracked and eliminated per the established SOPs.
3	CS-1	Construction site inspection program	Routine inspections of active construction sites will continue to be conducted in Year 4. The City's construction stormwater management ordinance will support the inspection program and provide a framework for following up with issues of non-compliance.

MCM(s)	BMP	Stormwater Activity	Description/Comments
4	PC-2	Post-Construction Stormwater Management	The water quality control requirements set forth in the Drainage and Erosion Control Design Manual went into effect on January 1, 2017. The requirements require new developments with over 5,000 square feet of impervious cover and with total impervious cover greater than 30% of the property to treat the first 1/2" of runoff. City staff will continue to review development plans to ensure the water quality control requirements are being met. Inspections of permanent water quality controls will continue to be conducted in Year 4 according to established SOPs.
4	PC-3	Long-term Operation and Maintenance	The City will continue to perform inspection of permanent stormwater controls within the City limits in Year 4. City Code section 143-8 includes inspection and maintenance requirements that will help to ensure maintenance and operational integrity of stormwater controls.
4	PC-5	Encouragement of LID	The City is planning to implement LID projects in Year 4 that will provide an example to local engineers and the development community.

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

MCM(s)	Measurable Goal(s) or BMP(s)	Implemented or Proposed Changes (Submit NOC as needed)
Not applicable		

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.):

   Not applicable

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)).

BMP	Description	Implementation Schedule (Start Date etc.)	Status / Completion Date (completed, in progress, not started)
Not applicable			

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))

   X 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: New Braunfels Utilities (NBU) is identified in the SWMP to perform tasks associated with address bacteria impairments on stream segments within the City limits. NBU is responsible for performing infrastructure inspections, preventative maintenance, and rehabilitation of the sanitary sewer system to prevent overflows and

discharges. These activities are conducted as part of the Sanitary Sewer Overflow Initiative agreement between NBU and TCEQ. Specific activities conducted by NBU are included in Section D (*Impaired Waterbodies*) of this report.

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

____ Yes __X__ No

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

____ Yes ____ No

If 'Yes,' list all associated authorization numbers, permittee names, and SWMP responsibilities of each member. (add additional spaces or pages if needed):

Authorization Number: _____ Permittee:_____

Authorization Number: _____ Permittee: _____

Authorization Number: _____ Permittee: _____

Authorization Number: _____ Permittee: _____

I. Construction Activities

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

The City received 35 NOIs and CSNs during Year 3. Additional construction projects were identified and documented in addition to those who submitted NOIs and CSN. One hundred and nine (109) active construction sites are included in the City's construction stormwater inspection inventory. This inventory includes most, if not all, active construction projects greater than 1 acre within the City of New Braunfels jurisdictional area.

2a. Does the permittee utilize the optional 7th MCM related to construction?

____ Yes __X__ 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

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): Robert Camareno Title: City Manager

Signature: _____ Date: 12/18/17

Name of MS4: City of New Braunfels

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).