Phase II (Small) MS4 Annual Report Form
TPDES General Permit No. TXR040000

A. General Information

1. Permit No. TXR040326
   Annual Report Period: August 13, 2013 – September 30, 2015
   Reporting Year: Fiscal Year – October 1st – September 30th
   Name of MS4/Permittee: City of Carrollton
   MS4 Operator Level: 4
   Contact Name: Tá Soriaga Telephone Number: 972-466-3066
   Mailing Address: 1945 E. Jackson Rd., Carrollton, TX 75006
   Email Address: ta.soriaga@cityofcarrollton.com
   Has a copy of this annual report been submitted to the TCEQ Regional Office? Yes. USPS Certified Mail No. 7014 2120 0001 5097 1570

B. Narrative Provisions

1. Provide information on the status of complying with permit conditions.
   a. Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ? Yes
      The SWMP was approved on February 27, 2015.
   b. Permittee is currently in compliance with recordkeeping and reporting requirements? Yes
   c. Permittee meets the eligibility requirements of the permit (e.g. TMDL, Edwards Aquifer limitations, compliance history, etc.)? Yes

2. Provide a general assessment of the appropriateness of the selected BMPs:
   Has the permittee determined that any of the selected BMPs are not appropriate for reducing the discharge of pollutants in storm water?
   An assessment of the appropriateness of the selected BMPs for the first MS4 permit term was done in year 4, and included in that year's annual report. All the selected BMPs were deemed appropriate and thus continued. When the current SWMP was developed, all the BMPs were again reviewed and revised where necessary to meet the new permit control measures. In addition, new BMPs were adopted to meet additional requirements that the City is now required to meet as a Level 4 MS4. Prior to setting the BMPs in the SWMP, these were discussed with key city departments tasked with their implementation. Once each department concluded and agreed to these BMPs as practicable and appropriate to the objectives, these were laid out in the SWMP and further discussed and approved in the Stormwater Management Committee, composed of directors of city departments. On several levels, the BMPs were assessed to be appropriate in terms of stormwater pollution prevention goals, and inclusion in the job process and within the department and city resources.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable.

The City continued to conduct Surface Water Monitoring in this reporting period. Dry Weather Screening was done to help identify and eliminate illicit discharges. Surface Water Monitoring continued to aid in the development of the BMP for Dry Weather Screening. It is being maintained to determine dry weather screening locations and to aid in determining our progress towards reducing the discharge of pollutants to the maximum extent practicable. During this report period, some of our Surface Water Monitoring locations were changed to better determine the water quality of the water as it enters our city and any significant changes as it flows through our city. The monitoring data suggests that the water quality of our creeks at most of the sampling locations had been improving until the drought, heavy rains, then drought again. However, the sampling may not tell us whether we are reducing the discharge of pollutants to the maximum extent practicable due to fluctuations in water quality depending on time of year, rainfall and structure of the channel. The city continues to reduce the discharge of pollutants to the maximum extent practicable through the implementation of our BMP's, particularly through our education and enforcement programs. We still rely heavily on our field personnel and citizens to report illicit discharges.

4. Provide a general evaluation of the program's progress, including any obstacles or challenges encountered in implementing BMPs, meeting the program's schedule, etc.

The City of Carrollton met, if not exceeded, all of the goals in the SWMP for this reporting period. Many different departments responsibly carried on with the implementing of the SWMP and the City continues to see great cooperation and communication in meeting its measurable goals and BMP's. The Citizen Advisory Committee remained valuable in providing input on the implementation of certain aspects of the SWMP and is on target in its discussions on the stormwater survey that is to be completed by the end of the permit term. Carrollton's citizens and city employees also sustained its integral role in detecting and reporting illicit discharges and spills. Our public education program continued to expand its reach to children in elementary schools, homeschoolers, and girl scouts and we had the opportunity to present our educational programs to the science teachers in one of the school districts. The Storm Water training in New Employee Orientation continued to be well received by the employees. The city's storm water program remained determined in monitoring the health or quality of surface water bodies in the city through its Surface Water Monitoring. This program provided the city with an assessment tool to determine the success of the storm water management program in reducing the discharge of pollutants to the maximum extent practicable. The Dry Weather Screening outfalls were changed in June 2015 after reviewing the Surface Water Monitoring data. Staff continued to GPS outfalls found in the field or new/relocated outfalls as needed. The city's IT Department has employees who maintain the storm water system map.

C. Stormwater Monitoring Data

Has the MS4 conducted analytical monitoring of stormwater quality? Yes

Surface Water Monitoring was conducted four times in this reporting period. The monitoring data results is utilized as one of the criteria in selecting the outfalls monitored during Dry Weather Screening. The Surface Water monitoring data was used to obtain a Water Quality Index (WQI) rating for each monitored segment. The WQI was based on five parameters: pH, DO, Turbidity, Total Phosphate and Nitrate. The WQI calculator used was from the Wilkes University Center for Environmental Quality Environmental Engineering and Earth Sciences website at http://www.water-research.net/watrqualindex/index.htm. Six creeks were monitored with 17 sampling locations for the first 3 monitoring times and 18 sampling locations for the last monitoring, namely: Indian Creek, Dudley Branch, Furneaux Creek, Hutton Branch, Cooks Branch and the Valwood Improvement Channel. The WQI results from the January 2014 data were: one segment had a Medium rating, five segments had a Good rating, one had a Good/Excellent rating and ten had Excellent ratings. The results from the July 2014

monitoring had one location with a Medium rating, one with a Medium/Good rating, nine with a Good rating, and five with an Excellent WQI rating. The results from the March 2015 monitoring had two locations with a Medium rating, nine with a Good rating, three with a Good/Excellent rating, and three with an Excellent WQI rating. The results from the July 2015 monitoring had one location with a Medium rating, one with a Medium/Good rating, twelve with a Good rating, and three with an Excellent WQI rating. One of the monitoring locations in July 2015 was dry so no data was obtained. Based on the WQI only, a majority of our sampling locations had an improved WQI from our initial monitoring in July 2010, until the alternating cycles of drought and heavy rains. The surface water monitoring data was reviewed in June 2015 and 58 new outfalls were selected to be monitored for Dry Weather Screening. The data from the surface water monitoring and dry weather screening are included in this report and can be found in Appendix I and II.

D. Impaired Water Bodies

1. Does the MS4 discharge to an impaired water body on the Texas 303(d) List — No
2. Does the MS4 discharge to a water body on the Index of All Impaired Waters? — No

E. Stormwater Activities Next Reporting Year

Describe any activities planned for the next permit year/reporting cycle.

Activities for the next reporting cycle include all of these activities: (1) with a year due of 0; (2) with the year due of December 12, 2015 that were still being implemented and not completed within this September 30, 2015 reporting cycle, and (3) with a year due of December 2016. The activities still to be completed by December 12, 2015 (and will be reported in the next reporting cycle) include:

- Develop SOP for Plan Review by Engineering
- Develop SOP for Site Inspections and Enforcement by Engineering
- Review and revise the Stormwater Pollution Prevention Ordinance
- Contractually require contractors to comply with stormwater control measures, good housekeeping practices and facility specific SOPs

The new activities due by December 12, 2016 activities include:

- Develop a list of all structural BMPs to be inspected
- Review and update the erosion and pollution prevention guidelines for road and bridge repair operations.
- Establish the Enforcement Response Guide
- Inventory of septic tanks in the city
- Develop a training program on illicit discharge detection for all field employees
- Develop a schedule for chemical application and disposal method for unused pesticides, herbicides and fertilizers
- Develop a list of pollutants of concern from sand, salt, and deicer materials,
- Assessment of city owned facilities
- Identification of high priority facilities
- Pollution Prevention training for applicable departments
- Develop a SOP for street Sweeping waste material disposal

F. SWMP Modifications and Additional Information

1. Describe any proposed changes to the SWMP in the coming reporting year.
   This report covers the activities that occurred from August 13, 2013 – December 12, 2013 during the previous permit and the activities that are occurring in the new permit from December 13, 2013 – September 30, 2015. The BMP 2.8 Maintenance Program for Sanitary Sewers in regards to the number of mile of sewer main cleaned has been replaced with an equivalent BMP that has the approval of TCEQ. Instead of cleaning about 200 miles of sewer main every year, it has been changed to a five year plan where the number of miles will vary depending on the year. The schedule for this permit term will be: 145 miles cleaned in 2014/2015, 194 miles cleaned in 2015/2016, 172 miles cleaned in 2016/2017, 194 miles cleaned in 2017/2018, and 179 miles cleaned in 20182019. This initiative was changed in February 2010 and received approval from TCEQ's James Gradney, Manager for the Enforcement Division.

G. Additional BMPs

1. 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.
   Additional BMPs are not necessary at this time since we do not have a TMDL or implementation plan.

H. Additional Information:

Is the permittee relying on another entity/ies to satisfy some of its permit obligations?	No
Is the named permittee sharing a SWMP with other entities?	No
Is this a system–wide annual report including information for all permittees?	N/A

I. Construction Activities

1. Does the permittee utilize the seventy MCM related to construction? No
2. Provide the number of construction activities (other than those where the permittee was the operator) that occurred within the regulated area as indicated via notices of intent or construction site notices in this report period.

No. of non-municipal construction activities:	47
No. of municipal construction activities greater than or equal to 1 acre:	4

J. BMP Status

MCM 1 Public Education

1.1 Storm Water Reading Materials

BMP	Measureable Goal	Activity	Year Due	Status or Success
	X	1. Distribute copies of brochures to all display racks at city buildings and at all public events and presentations. (200 per year)	0	Exceeded Goal
	X	2. News briefs in local paper or mailers/utility bill inserts twice a year	0	Exceeded Goal
	X	3. Continue to update and distribute the storm water letters to all apartment managers currently in the database.	0	Exceeded Goal

1. From August 2013 – September 20, 2014 a total of 2,396 and from October 1, 2014 – September 2015 at total of 2,053 brochures, pamphlets, bookmarks and children's activity books were distributed at public events, presentations and at city facilities.
    A. Totals for the distribution of brochures or educational materials. The two brochures that were designed specifically for storm water were "Managing Stormwater" (187 + 148 number distributed in each year) and "Stormwater Pollution" (369+ 162 number distributed in each year). Other brochures or pamphlets distributed included: "Cool Energy!" brochure, "Develop Naturally!" brochure, "Five Ways to Take Care of Texas" bookmark, "Teachers Guide To Environmental Resources" pamphlet, "Household Tips to Protect Our Waterways", "Let's Work Together to Stop Illegal Dumping", "Fat Free Sewers" pamphlet, "Smartscape – Got Drought" sheet, "Do you know what happens when it rains" book, "Everyone Shares a Watershed" sheet, How to Protect Your Watershed", "Non-Point Source Pollution" book, "You Can Protect Our Drinking Water" brochure, "Household Tips to Protect Our Water" sheet, "What is Texas SmartScape/7 Steps to a Smart Yard" sheet, and "Your Green House" book,. We distributed educational bookmarks which were "Doo the Right Thing" (424+294) and "TX Smartscape" (332+331 number distributed in each year). Activity and coloring books were distributed to children and they included: "Don't Trash It! Super Fun" activity book, storm water activity sheets (matching game, word search and word scramble), "Reuse the Rain" activity sheet, "Thirstin's Wacky Water Adventure" activity and coloring book, and "River & Sky's Lone Star Adventure", and "River Rangers Protecting Our Water" coloring books.
    B. Brochures continued to be placed at all city facilities.
        1. The "Managing Stormwater" (145+ 123) and "Stormwater Pollution" (154+ 137) brochures were placed at all city facilities where appropriate. The facilities include the Central Service Center, City Hall, Crosby Recreation Center, Hebron and Josey Library, Josey Ranch Lake Library, Rosemeade Recreation Center and the Senior Center.

2. "Doo the Right Thing" (266+230 distributed) bookmarks and the "Animal Ownership: Rights and Responsibilities" brochure (57+467 distributed) were available at Animal Services for this reporting period.

2. News briefs were placed in the local paper or utility bill inserts at least twice a year from August 13, 2013 – September 30, 2014 and from October 1, 2014 – September 30, 2015. News briefs appeared in various news media throughout the year. Articles appeared eight (8) times in local newspapers or on the papers websites. Twenty-seven (27) articles appeared in the City of Carrollton's quarterly newsletter, On the Horizon. Four (4) articles appeared on neighborsgo.com, thirty-four (34) articles in NetBill, and sixty-four (64) news briefs were placed on either Facebook, Twitter, city website, next door or all four.

   A. News briefs and Articles in the Carrollton Leader, Bubble Life or other news media:
      - May 11, 2014 – "Texas SmartScapes Save Water, Money and the Environment"
      - August 13, 2014 – "Picking Up after pets good for Carrollton and its waterways"
      - November 14, 2014 – "Ditch the grease in a responsible way"
      - November 30, 2014 – "Cease the Grease"
      - December 15, 2014 – "Carrollton provides free rain, freeze sensors"
      - March 26, 2015 – Smartscape article
      - July 9, 2015 – Irrigation Inspection
      - September 23, 2015 – Disposing of Hazardous Waste

   B. City of Carrollton's Quarterly Newsletter – On the Horizon, is distributed to approximately 34,000 households and businesses.
      - September 2013 – "Yard Waste – A Source of Pollution", "Got Drugs",
      - October 2013 – "Free Cooking Oil Disposal"
      - November 2013 – "Gift Ideas that Help Protect Our Creeks", "Free Cooking Oil Disposal", and "Carrollton's Storm Water and You"
      - February 2014 – "Waterwise Plant Sale", "Household Hazardous Waste Collection Services", and "Reduce Water Use!"
      - April 2014 – "Get Pools Ready for the Summer", "Less Water, More Green", "Got Drugs?" and "Waterwise Plant Sale"
      - July 2014 – "What is Your Environmental Risk?" and "Summertime Water Conservation"
      - September 2014 – "Help Stop Illegal Dumping" and "Got Drugs?"
      - October, 2014 – "Flushable Wipes", "Free Cooking Oil Disposal", and "Keep Grease Out of the Sewer System"
      - February 2015 – "Texas Natives Tough It Out"
      - April 2015 – "Waterwise Plant Sale", "Drinking Water Week", and "Less Water, More Green"
      - July 2015 – "Staying the Course with Water Conservation" and "Fertilize Your Lawn, Not Our Creeks"
      - September 2015 – "Protect Our Waterways"

   C. Neighborsgo.com (A Dallas Morning News Publication):

- October 25, 2013 – “Drug Take Back”
- April 26, 2014 – “Pharmaceutical Collection Event”
- May 16, 2014 – “Getting Pools Ready for the Summer”
- November 14, 2014 – “Cease the Grease”

D. NetBill (Approximately 13,957 subscribers):

- October 2013 – “Drug Take Back”
- November 2013 – “Cease the Grease: Free Cooking Oil Disposal”
- December 2013 – “ Cease the Grease”
- March 2014 – “Texas Smartscape”
- April 2014 – “Save the Drains for Rain!,” and Pharmaceutical Collection Event
- June 2014 – How to Drain your Pool
- July 2014 – “Picking up After Your Pets” and How to Drain Your Pool
- August 2014 – Draining Your Pool, “Picking Up After Your Pets”, and Drug Disposal Day
- September 2014 – Drug Take Back, Drain Your Pool, “Help Stop Illegal Dumping”
- October 2014 – “Disposing of Household Hazardous Waste”, Pick Up After Pets, and Drain Your Pool
- November 2014 – “Cease the Grease: Free Cooking Oil Disposal”, “Stormwater and You”, “Pick Up After Pets”, “Turn Off Your Sprinklers”, and Hazardous Waste
- December 2014 – Cease the Grease, “Turn Off Your Sprinklers”, and “Stormwater and You”
- March 2015 – Texas Smartscape
- April 2015 – “Save the Drains for Rain” and Texas Smartscape
- August 2015 – Picking Up After Pets and Irrigation Inspections
- September 2015 – “Protect Our Waterways”, Picking Up After Pets and Drug Disposal

E. Facebook/Twitter/Website/Next Door:

- August 2013 – “Picking Up After Pets Good for Carrollton and Its Waterways”, “Pick Up Pet Waste”
- September 2013 – “Drug Take Back” and “Disposing of Hazardous Waste”
- October 2013 – “”Drug Take Back” and “Disposing of Household Waste”
- November 2013 – “Cease the Grease” and “Stormwater and You”
- December 2013 – “Cease the Grease”
- February 2014 – “National Take Back Initiative”
- March 2014 – “National Take Back Initiative”, Texas SmartScape, and “Save the Drains for Rain”
- April 2014 – “Pharmaceutical Collection Event, “Stop Illegal Dumping”, “Save the Drains for Rain”, and Texas Smartscape
- May 2014 – “Texas Smartscape Save Water, Money and the Environment”, Pool Drainage, Irrigation Inspections

- June 2014 – How to Drain Your Pool
- July 2014 – Picking up after Pets and Draining Your Pool
- August 2014 – "Picking Up After Pets Good for Carrollton and Its Waterways"
- September 2014 – Drug Take Back, Drain Your Pool, "Help Stop Illegal Dumping", "Flushable Wipes"
- October 2014 – "Pick Up After Pets", Drain Your Pool, "Disposing of Household Hazardous Waste", and "Turn Off Sprinklers"
- November 2014 – "Cease the Grease", "Stormwater and You", "Pick Up After Pets", and "Turn off Your Sprinklers"
- December 2014 – "Cease the Grease", "Turn Off Your Sprinklers", "Strormwater and You", and "Pick Up After Pets"
- January 2015 – "Turn Off Your Sprinklers" and "Don't Dump, Flows to Creek"
- February 2015 – "Smartscape Plant Sale" and "Save the Drain for Rain"
- March 2015 – Texas Smartscape, "Save the Drains for Rain"
- April 2015 – "Save the Drains for Rain", and Texas Smartscape
- May 2015 – "Save the Drains for Rain", "Getting Pools ready for Summer", Irrigation Inspections, Smartscape
- June 2015 – "Getting Your Pool Ready for Summer", "Save the Drains for Rain", Irrigation Inspections, and Report Pollution
- July 2015 – "Picking Up After Pets", "Smart Irrigation Month", "Protect Your Water Sources", Irrigation Inspections, and "Save the Drains for Rain"
- August 2015 – Irrigation Inspections and "Picking Up After Pets"
- September 2015 - "Household Hazardous Waste", Drug Disposal, "Picking Up After Pets"

F. Posters were distributed to city facilities for events:

- October 2013 – "Drug Take Back" – 8 posters were displayed at City Hall, Libraries, Recreation Centers, Senior Center, Animal Services
- November 2013 – Free Cooking Oil Disposal – 8 posters were displayed at City Hall, Hebron and Josey Library, Josey Ranch Lake Library, Crosby Recreation Center, Rosemeade Recreation Center, Senior Center, Animal Services
- November 2014 – Free Cooking Oil Disposal – 8 posters were displayed at City Halls, Hebron and Josey Library, Josey Ranch Lake Library, Crosby Recreation Center, Rosemeade Recreation Center, Senior Center, Animal Services
- September 2015 – National Take Back Initiative (Medication Disposal) – 11 posters displayed at City Hall, Hebron and Josey Library, Josey Ranch Lake Library, Crosby Recreation Center, Rosemeade Recreation Center, Senior Center, Animal Services, Police Department, Municipal Court, and Tennis Center

3. From August 2013 – September 30, 2014 and from October 1, 2014 – September 30, 2015 at least one notice letter and information on

stormwater related issues addressed during the annual inspection, were sent to all apartment complexes currently in the database. The letters were usually sent the month prior to the annual inspection being performed. Apartment inspections are done based on the calendar year.

4. Educational letters to residents:
    - Code Enforcement sent 4345 letters on the proper disposal of grass clippings from August 13, 2013 – September 30, 2014 and 2605 letters from October 1, 2014 – September 30, 2015.

1.2 Public Presentations and Educational Events

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Four presentations per year	0	Exceeded Goal

1. Presentations – A total of thirty-two (32) presentations were given in this reporting period, fifteen (15) presentations or public events were conducted from August 13, 2013 – September 30, 2014 and seventeen (17) from October 1, 2014 – September 30, 2015. The presentation and educational events are listed below. These presentations and events are done by Environmental Services and Public Works staff members.

Date	Event	Time	Attendance	Presentation/Display	Presenters	Group
09/12/2013	NAC Fall Event	7-8:30pm	unknown	Storm water display board		Residents
10/01/2013	National Night Out on Barclay	6-8pm	unknown	Storm water display board	Travis C, Cathy E	Residents
10/10/2013	Neighborhood Advisory Commission Meeting	6:30pm	NAC Board Members	Storm Water and Citizens Advisory Committee Volunteer Request	Krista Pender	Residents
10/15/2013	Café Smith (Newman Smith HS)	9:15a, 10:20a, 12:45p	see sign in sheets	Food Safety Presentation	Nisha Patel	Residents - High School Students
11/19/2013	Educational Day at the Pump Station	8am-12:30pm	~292 students and teachers	Freddy the Fish, Enviroscape, Incredible Water Journey, Rainfall Simulator, Stream Trailer, Scavenger Hunt in the Garden, Pump Station Tour	Cathy E, Cindy A, Darwin O, Everette D, Josni S, Krista P, Michael R, Nisha P, Scott M, Steven T, Travis C	RE Good Elementary School Grades K-2 (residents)
02/08/2014	Free Neighborhood & HOA Leadership	8am-1pm		Storm water & ES display board	Cathy E & Scott M	Residents and HOA

	Training					
4/26-27/2014	Earth Day Dallas at Fair Park	10am-6pm	unknown	Storm Water Game wheel	Ta' Soriaga & Cindy Arias	Residents and visitors
05/17/2014	Waterwise Plant Sale at Home Depot	8am-12pm	unknown	Storm Water display board with storm water and Smartscape materials	Krista Pender	Residents and visitors
05/21/2014	Public Works Rodeo	9am-3pm	unknown	Environmental Services display board	Krista Pender, Cindy Arias	Residents, visitors, city employees
07/02/2014	Sunray Chinese School	1:00-3:30pm	~58	Freddy the fish, Enviroscape, Incredible Water Journey, Storm & Water Scavenger Hunt	Krista Pender, Cindy Arias, Lorrie Reeves (PW)	School kids 2nd Grade - 6th Grade
07/19/2014	Villas on Raiford	10:30-11:10am	13	Preventing Stormwater Pollution & SSOs	Krista Pender, Scott McIntire	Residents
09/09/2014	Citizens Evening at City Hall	5:30pm-8:30pm	see sign in sheets	Display board w/Stormwater, Food Safety, Code Enf., and Animal Services	Krista Pender, Teresa Iglesias, Travis Caperton, Tim Roush, Steven Taylor	Residents
09/24/2014	Industry Meeting	9:30-10:30am	see sign in sheets	Pretreatment Reminders & Stormwater reminder	Courtney Vanous	Regulated Industries
10/25/2014	Bethel Bible Fellowship - Community Fun Day	10am-1pm	unknown	Tabletop display w/SW information & water conservation	Krista Pender	Residents and Visitors
02/21/2015	Neighborhood Leadership Training	8am-2pm	~75 (Community Development event)	"Environmental Quality" & tabletop display	Ta' Soriaga	Residents
04/08/2015	Bank of America Webcast	12-1pm	~60	Stormwater in Carrollton and North Texas; Water Conservation	Krista Pender & Lorrie Reeves	Residents & Visitors
04/09/2015	Ted Polk Middle School	10:15am; 1:35pm, 2:30pm	~60 students	NCTCOG High School video and 2 Enviroscapes - Nonpoint Source Pollution & Drinking Water	Krista Pender & Lorrie Reeves	Students

04/14/2015	Blanton PTA Meeting	7-7:30pm	unknown	Reduce, Reuse and Recycle to Conserve Water and Prevent Stormwater Pollution Presentation & giveaways	Krista Pender	Carrollton residents
04/15/2015	Homeschooler Presentation	1:30-2:30pm	11 kids & 5 parents	Freddy the Fish, EnviroScape, Freddy the Fish Video, High School Video	Krista Pender & videos	Students/ Resdients
04/29/2015	Halliburton Earth Day Event	11am-1pm	unknown	Tabletop display w/SW information & water conservation	Krista Pender, Lorrie Reeves	Halliburton employees
05/02/2015	Waterwise Plant Sales Event	8am-12pm	unknown	Tabletop display w/SW information & water conservation	Krista Pender, Lorrie Reeves	Resident & Visitors
05/14/2015	Public Meeting	5:30pm-6:30pm	9	tabletop display and Stormwater presentation	Krista Pender	Residents, City Staff, Citizen's Stormwater Advisory Committee
05/20/2015	Public Works Rodeo	9:30am-3pm	unknown	tabletop display and puzzles for kids	Krista Pender	Residents, City Staff, Visitors
08/12/2015	Halliburton Training		32	Living "Green" at Home and at Work	Courtney Vanous	Halliburton employees
09/17/2015	Central Elementary 2nd Graders	9:15-10am, 10-10:45am; 1:30-2:15pm	98 students and 6 teachers	Freddy the Fish and EnviroScape	Krista Pender, Lorrie Reeves	Students
09/29/2015	CFBISD Afterschool Science Session for Teachers	3:30-4:10pm	40	Overview of the Incredible Water Journey, Freddy the Fish,& Enviroscape. Video snippets on High School sw and Freddy the Fish	Krista Pender, Lorrie Reeves	3rd-5th Grade Science Teachers
9/30/2015	Industry Meeting	9:30-11:30am	20	Pretreatment Program, Stormwater and Grease Interceptors and FOG	Courtney Vanous, Cindy Arias	Regulated Industries

1.3 Promotional Items

BMP	Measureable Goal	Activity	Year Due	Status or Success
	X	1. Distribute 200 promotional items per year	0	Exceeded Goal

1. Distribute at least 1000 promotional items by the end of the first permit term (200 per year)
    - Carrollton distributed 3,920 promotional items from August 13, 2013 – September 30, 2014 and 1,255 from October 1, 2014 – September 30, 2015. The promotional items were distributed during the special events and presentations listed in 1.3.2. All of the giveaway items (except the erasers) included a short educational message on stormwater and Carrollton's hotline number to report polluters. Promotional items included magnets, pencils, erasers, crayons, trash can pencil sharpeners, rulers, tattoos, trash bags, pet waste containers, bookmarks, chip clips and jar openers.

1.4 Annual "March is Texas SmartScape™ Month

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Determine a level of participation in the regional "March is Texas SmartScape™ Month" program based on available resources, and select an outreach activity to conduct. Complete coordination with NCTCOG annually in February and conduct the selected activity (ies) annually in March. Repeat each year	0	Met Goal

1. In this reporting period, Carrollton conducted an outreach activity and participated in the NCTCOG Regionally Developed Initiative for "March is Texas SmartScape Month":
    - Placed the article "Give Water the Boot! Plant Texas Roots!" in the February 2014 On the Horizon newsletter and the article "Texas Natives Tough It Out" in the February 2015 On the Horizion newsletter.
    - Set up a display window at both the Hebron and Josey Library and the Josey Ranch Library for the month of March2014 and March 2015.
    - Distributed 400 total Texas SmartScape bookmarks at the library during the month of March 2014 and March 2015
2. The city maintained the two demonstration/educational gardens with native and adaptive plants. One garden is located at the Don Cline Pump Station and the other is at the Josey Ranch Lake Library.
3. According to NCTCOG, there were 1,475 sessions from Carrollton to the Texas SmartScape website from August13, 2013 – September 30, 2014 and 1302 from October 1, 2014 - September 30, 2015.
4. On May 17, 2014 and May 2, 2015, the city participated in the Waterwise Plant Sale with Home Depot. The Program is a

partnership effort with Home Depot and other nurseries to offer consumers native and adapted plants that thrive in North Texas. Home Depot's nurseries provided the selection of TX SmartScape plants from a list created with NCTCOG, AgriLife and others. Educational Components included:

- Public Works Water Conservation
- Environmental Services Stormwater
- Master Gardeners were on hand to help consumers with questions

1.5 Environmental Education for Commercial and Industrial Facilities

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Develop educational items for distribution related to pollution prevention for industrial and commercial facilities.	0	Met Goal
	X	2. Distribute information to facilities. Update as needed	0	Met Goal
	X	3. Hold annual industry meeting	0	Met Goal

1. No new educational items were developed for distribution from August 13, 2013 – September, 2015. The city continued to distribute existing educational materials to the food establishments and industries.
2. Distributed information in this reporting period included:
   - The TCEQ grease posters described in 1.9 of this section continued to be distributed to new and existing establishments as needed from August 13, 2013 – September 30, 2015. The poster is posted on the city's food safety page of the website at http://cityofcarrollton.com/Modules/ShowDocument.aspx?documentid=3501.
   - The Storm Water Pollution Prevention Posters continued to be distributed to all restaurants. The poster is also posted on the website at www.cityofcarrollton.com/Modules/ShowDocument.aspx?documentid=3499.
   - No Exposure Certificate information to 11 industries
   - Non-Stormwater Assessment information to 2 industries
   - Stormwater checklist to 2 industries
3. Industry Meeting held during this report period:
   - An Industry Meeting was held on September 24, 2014. The presentation included information on Pretreatment Program review, Stormwater inspections, and a question and answer session. A total of thirty (30) industrial representatives attended the meeting.
   - An Industry Meeting was also conducted on September 30, 2015. Presentations included information on the Pretreatment Program, Stormwater and Grease Interceptors and FOG. A total of twenty (20) industrial representatives attended the meeting.

1.6 Environmental Education for Construction Site Personnel

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Distribute information packet to 100% of applicants for a grading or building permit.	0	Met Goal

- The construction packet consisted of three (3) documents: Regulations Affecting Your Construction Activity; Article 10 of the Storm Water and Flood Protection Ordinance; and the pertinent information from the City of Carrollton the Storm Water Pollution Prevention Ordinance (SWPPO). All of these documents continued to be on the City of Carrollton's Storm Water web site at www.cityofcarrollton.com/index.aspx?page=245.
- The construction packet was distributed to all applicants that applied for a grading or building permit during the preconstruction meeting. Development Services continued to include the construction packet in their preconstruction manual with the exception of the new SWPPO, this was distributed separately during the preconstruction meeting. Distribution of the packet was done by Development Services, Engineering or Environmental Services. A short presentation was also given over the requirements in the packet and to answer any questions the contractors had. In some instances the information described above were switched out with more pertinent information per the hosting department.

1.7 Storm Drain Marking

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Placement or replacement of 100 markers per year	0	Exceeded Goal

1. Volunteers placed a total of 275 storm drain markers from August 13, 2013 – September 30, 2014 and a total of 378 from October 1, 2014 – September 30, 2015. Two markers were placed on each storm drain, one in English and one in Spanish.

1.8 Storm Water and Pollution Prevention Videos and Public Service Announcements

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Continue broadcast of Storm Water Management video or PSA's on local cable public access channel and on the stormwater webpage	0	Met Goal
	X	2. Evaluate acquisition of other videos, incorporate to video library if appropriate	0	Met Goal
	X	3. Maintain library of videos. Include information on the web site.	0	Met Goal

1. Cable slides and Public Service Announcements (PSA) ran on the cable public access channel in this reporting period.
    a) Carrollton ran various storm water cable slides every day from August 1, 2013 through September 30, 2015. Educational information on the cable slides included:
        - Don't Be a Turkey…Recycle your used cooking oil – ran in October 2013, November 2013, October 2014 and November 2014
        - Storm Drains are for Rain Only
        - Help Keep Pollution Out of Storm Drains
        - Pool Discharges
        - Smartscape Your Landscape
        - Help Keep Pollution Out of Storm Drains
        - Got Drugs? (Medication Disposal Event) – ran in September 2013, October 2013, March 2014, April 2014, September 2014 and September 2015
        - Household Hazardous Waste Collection (5 slides)
        - Picking Up After Pets is Good for Carrollton and Its Waterways (5 slides)
    b) PSA's on grass clippings, paint and car washes ran every day at 6:45 p.m. from August 1, 2013 – September 30, 2015. The PSA's continued to be posted on the city's website in this reporting period at www.cityofcarrollton.com/index.aspx?page=1258.
2. From August 13, 2013 – September 30, 2014, the city did not obtain any new videos. From October 1, 2014 – September 30, 2015 the city obtained 3 new stormwater videos: Freddy the Fish, Stormwater for High School Students and NCTCOG Stormwater Training Series Illicit Discharge Detection and Elimination (Spanish version).
3. Prepared a library of videos, include information on the web site– Carrollton currently has many storm water videos. The videos were available to the public through Environmental Services but are mainly used during presentations. Some of the videos have been posted on the website for viewing by the public. The video library include the following:
    a) After the Storm
    b) Captain Crud and the Cruddies
    c) Effective Floodplain Management of the Upper Trinity
    d) City of Carrollton "Stormy Carrollton"
    e) Freddy the Fish
    f) Frogline
    g) Is a Green Home in Your Future?
    h) Monitoring Water Quality in Storm Drainage Systems: Parts I and II
    i) NCTCOG Landscaping PSA's on Water Conservation and Yard Trimmings
    j) NCTCOG Municipal Employee Training Video: *Construction Stormwater Awareness*
    k) NCTCOG Municipal Employee Training Video Series
    l) NCTCOG Stormwater Training Series Illicit Discharge Detection and Elimination (English & Spanish)
    m) Profit Through Prevention Best Practices for Fleet Maintenance

n) *Reduce Runoff: Slow it Down, Spread it out, Soak it in!* (Also includes *After the Storm* video)
o) *Storm Water Planning for the Future*
p) *Storm Water Pollution Changes and Challenges in Carrollton*
q) *Stormwater Pollution Video for High School Students*
r) *TNRCC Small Business and Local Government Assistance Program*
s) *Cease the Grease The Apartment Edition*
t) *Cease the Grease: Restaurant Edition*

1.9 TCEQ FOG Initiative

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Distribute one to every new and existing restaurant currently in database listed as having a grease trap	0	Met Goal
	X	2. Distribute one to every manager of an apartment complex currently in the database at least once every year.	0	Met Goal
	X	3. Routine inspections for posters displayed and redistribute posters as needed for every restaurant currently in database	0	Met Goal
	X	4. Distribute grease control information to tenants in multifamily complexes yearly	0	Met Goal
	X	5. Distribute grease control information to industries yearly	0	Met Goal
	X	6. Grease control information provided in water bills and/or in the city newsletter three times a year	0	Exceeded Goal
	X	7. Information posted on the city website	0	Met Goal
	X	8. Three Presentations per year	0	Exceeded Goal

1. All new and existing applicable food establishments have been issued a grease poster and educated on grease reduction. The posters are laminated and are required to be displayed. The directive was begun in late August 2007 and is based on that term. For new establishments, the grease posters were either distributed during the permitting or first routine inspection. The existing food establishments were given another poster if they were unable to locate their poster during the routine inspections. The distribution of the poster was noted on the appropriate inspection form (either the permitting or routine inspection form).
2. Letters were sent out with the annual inspection notice educating apartment managers on storm water issues. The letters are usually mailed the month prior to the annual inspection but may be mailed even earlier but always prior to the inspection.
3. The food establishments were inspected at least once in this report cycle for the grease posters being displayed. Many restaurants were inspected multiple times throughout the year. Each time this was done it was noted on the appropriate inspection form.
4. Pamphlets were distributed to each unit in multi-family complexes on July 17-19, 2014 (total 15,261 brochures to industries and 76

complexes) and June 8 & 11, 2015 (total of 15,261) for this report period.

5. Pamphlets were distributed to selected industries on June 17-19, 2014 (total 15,261 distributed including apartments) and June 8-11, 2015.
6. Grease control information was provided in water bills and/or in the city newsletter 6 times from August 13, 213 – September 30, 2014 and 6 times from October 1, 2014 – September 30, 2015. Grease control information was also shown on cable television, placed on the city website, Facebook and Twitter, and advertising posters were placed at city facilities for the cooking oil collection event.
    a. Utility Bill Inserts/Carrollton Quarterly Newsletter (*On the Horizon*). Each of the following appeared in *On the Horizon* which was mailed to 34,000 household and businesses:
        - October 2013- "Free Cooking Oil Disposal" and "Keep Grease Out of the Sewer System"
        - November 2013 – FREE Cooking Oil Disposal
        - October 2014 – "Flushable Wipes", "Free Cooking Oil Disposal" and "Keep Grease Out of the Sewer System"
    b. Carrollton Leader:
        - Cease the Grease
    c. NetBill – Sent to approximately 13,957 subscribers
        - October 2013 – Cooking Oil
        - November 2013 – Cease the Grease: Free Cooking Oil Disposal
        - December 2013 – Cease the Grease
        - October 2014 – Free Cooking Oil Disposal
        - November 2014 – Free Cooking Oil Disposal
        - December 2014 – Cease the Grease
    d. Neighborsgo.com
        - November 2014 – Ditch the grease in a responsible way
    e. Cable Television:
        - Free Cooking Oil Disposal Event information slide ran at 6:45pm every day in October 2013, November 2013 October 2014, and November 2014.
    f. The Cooking Oil Disposal event notification was placed on the City web site in November 2013 and December 2013, and on Twitter on November 22 & 27, 2013. "A Successful Cease the Grease Event was placed on Facebook and Twitter on December 6, 2011. The Cooking Oil Disposal event notification was placed on the City web site in November 2014 and December 2014.
    g. Eight (8) advertising posters about Cease the Grease Cooking Oil Disposal Event were placed at City Hall, Animal Services, Josey Ranch Lake Library, Hebron and Josey Library, Crosby Recreation Center, Rosemeade Recreation Center, and Senior Center in November 2013 and again in November 2014. Flyers were also distributed in November 2013 and November 2014.
7. Grease control information was available on the Public Works page of the city's website every day of the year at http://www.cityofcarrollton.com/index.aspx?page=282.
8. From August 13, 2013 – September 30, 2014, eighteen (18) educational events or programs were given on water conservation, water quality and backflow, fats, oils and grease including one public involvement event. From October 1, 2014 – September 30, 2015,

nineteen (19) educational events or programs were given on water conservation, water quality and backflow, FOG, including one (1) public involvement event. The events or programs were:

a. November 19, 2013 - Good Elementary at Don Cline Pump Station
b. December 2-3, 2013 – Cooking Oil Collection Event (collected 411 gallons)
c. March, 29, 2014 – Fix a Leak Week at Home Depot
d. April, 17, 2014 – Frito Lay Earth Day
e. April 26-27, 2014 – Earth Day at Fair Park
f. May 5, 9, 20, 22, 23, 29, 30, 2014 – Education at CFBISD Elementary Schools with AgriLife Extension (1309 kids)
g. May 21, 2014 – Public Works Water Week
h. May 17, 2014 – Texas SmartScape Plant Sale at Home Depot
i. June 18, 2014 – Josey Ranch Library Incredible Water Journey
j. July 2, 2014 – SunRay Chinese School
k. September 9, 2014 – Citizens Evening at City Hall
l. September 13, 2014 – Water Wise at Hebron and Josey Library
m. October 15, 2014 - Puppet Show Program
n. November 1, 2014 - Creekview High School 5K
o. December 2-3, 2014 – Cooking Oil Collection Event
p. January 21, 2015 – Home Schoolers
q. February 18, 2015 – Carrollton Home School Group
r. February 21, 2015 – Neighborhood Leadership Training
s. March 14, 2015 – Fantastic Plants for North Texas
t. April,8, 2015 – Webinar to Bank of America
u. April 9, 2015 – Water presentation
v. April 11, 2015 – Smart Watering for Homeowners
w. April 23, 2015 – Neighborhood/ HOA Conservation Presentation
x. April 30, 2015 – Halliburton Earth Day Event
y. May 2, 2015 – Home Depot Texas Native Plant Sales
z. May 20, 2015 – Public Works Rodeo Event
aa. June 17, 2015 - Super Hero's for Planet Earth
bb. June 23, 2015 - Ask the Expert
cc. August 21, 2015 – Conservation Program – Summer Lunch
dd. September 7, 2015 – Water Conservation program & Stormwater Pollution Prevention
ee. September 28, 2015 – Water Conservation Program & Stormwater Pollution Prevention Program Expo for CFBISD Science Teachers

1.10 Household Hazardous Waste Disposal

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Develop one mailer or water bill insert per year	0	Met Goal
	X	2. Distribute mailer or water bill insert yearly	0	Met Goal
	X	3. Post information on the web page for every day of the year	0	Met Goal

1. One article, "Enhanced Household Hazardous Waste Collection Services", was developed for use from August 13, 2013 – September 30, 2015 to educate residents on how to dispose of their household hazardous waste. Cable slides from previous years ran on cable television.
2. The articles were distributed at follows:
    a. "Enhanced Household Hazardous Waste Collection Services" appeared in:
        - City website in September 2013 and October 2013
        - *On the Horizon* the February 2014 edition;
        - *On the Horizon* the November 2014 edition
    b. Household Hazardous Waste Collection slides (5 slides) ran on the cable television every day of the month during this reporting period August 2013 – September 30, 2015.
3. The Household Hazardous Waste Collection Center information was located every day of the year during this reporting period on the city website at www.cityofcarrollton.com/index.aspx?page=58.

1.11 Pet Waste Education

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Distribute to all residents adopting or reclaiming a pet, at presentations, and public events.	0	Met Goal
	X	2. Maintain signs in parks and greenbelts as needed	0	Met Goal

1. "Doo the Right Thing" bookmarks and "Animal Ownership: Rights and Responsibilities" brochures were available at Animal Services for residents adopting pets and were also distributed during some public events and presentations. The bookmarks are part of the NCTCOG Regionally Developed Initiative and are purchased through NCTCOG's Cooperative Purchase. The bookmarks contain information on the impacts of disposing of pet waste improperly and how to properly dispose of the waste. The brochure, "Animal Ownership: Rights and Responsibilities", was developed during the first permit term. From August 13, 2013 – September 30, 2014, a total of 424 bookmarks and 95 brochures were distributed and from October 1, 2014 – September 30, 2015 294 bookmarks and 474 brochures were distributed at Animal Services and during public events and presentations. Information about the removal of pet waste continued to be posted on the Animal Services website under ordinances at www.cityofcarrollton.com/index.aspx?page=131. A link

to the North Central Texas Council of Governments public education website for pet waste information continued to be on the City's Storm Water webpage at www.cityofcarrollton.com/index.aspx?page=245. Pet Waste containers with plastic bags and the message "DOO the Right Thing" were given away during applicable special events. A total of 253 pet waste containers from August 13, 2013 – September 30, 2014 and 180 from October 2014 – September 2015 were distributed to pet owners.

2. Pet waste signs in parks and greenbelts continued to be maintained as needed during this reporting period. On July 24, 2015, Carrollton opened its first dog park with pet waste signs and pet waste bags included in the park area.
3. According to NCTCOG, 39 user numbers on the NCTCOG Pet Waste web page originated in Carrollton from August 13, 2013 – September 30, 2014. From October 1, 2014 – September 30, 2015 1 person took the pledge to pick up after their pet and their web page had 978 users with 1,238 page views.
4. The city ran cable screens on "Picking Up After Pets is Good for Carrollton and Its Waterways" every day from August 13, 2013 – September 30, 2015. This article appeared in the following news media:
    a. Website in August 2013,
    b. Website/Facebook/Nextdoor in July 2014,
    c. Website and Netbill in August 2014,
    d. Netbill in September 2014,
    e. Netbill , Website and Instagram (6 likes) in October 2014,
    f. Netbill in November 2014,
    g. Instagram (3 likes) in December 2014
    h. Website, Facebook (1071 views) and Twitter in July 2015
    i. Netbill and Website in August 2015
    j. Netbill, Website and Twitter in September 2015

1.12 Environmental Services Website

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Update the information on the web page	0	Met Goal
	X	2. Add additional information as it becomes available.	0	Met Goal

1. The Environmental Services web page is available every day of the year at www.cityofcarrollton.com/index.aspx?page=231 . In addition to this, news briefs and utility bill insert articles are posted on the News & Updates section of the city website at www.cityofcarrollton.com/index.aspx?page=996.
2. Information was updated as needed on both Environmental Services and the city pages of the website.

1.13 Electronic Newsletter for City Employees

BMP	Measurable Goal	Activity	Year Due	Status or Success

	X	1. Distribution of two electronic newsletters per year	0	Met Goal

1. From August 13, 2013 – September 30, 2015, the city distributed 4 newsletters to all city employees. They were:
   - November 2013 – Articles included "Tips to Prevent Stormwater Pollution" and "Gift Ideas that Help Protect our Creeks!" The newsletter was included in the City Council Newsletter on November 22, 2013.
   - April 2014 – Articles included "Illicit Discharges" and pictures of illicit discharges that may be observed in the field. The newsletter was included in the City Council Newsletter on April 18, 2014.
   - November 2014 – Articles included Non-hazardous cleaning products, "Car Care for Cleaner Water" and "What Do Leaves and Storm Drains Have in Common?"
   - May 2015 – Articles included "Looking on the Bright Side of Rain", "Non-Toxic Cleaning Tips for Spring", and "Dog Poop Facts!" The newsletter was included in the May 29, 2015 City Council Newsletter.

1.14 Environmental Educational School Kit

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Distribute bags at events and or presentations	0	Met Goal
	X	2. Review and update bags as needed	0	Met Goal

1. Sixteen (16) Environmental Educational School Kits were distributed from August 13, 2013 - September 30, 2014 to the teachers at RE Good Elementary. Thirty (30) "Classroom Water Education Programs Offered by the City of Carrollton" packets were given to Carrollton-Farmers Branch School District for distribution to their teachers during a meeting on July 30, 2015.
2. The educational items distributed from August 13, 2013 – September 30, 2014 included in the distributed bags varied depending on the grade level. All bags included items or resources for use in the classroom, brochures, giveaways and a reusable bag. Used materials will be replaced as needed, pending available funding. The one teacher bag distributed included Reuse the Rain Activity sheet, Thirstin's Wacky Water Adventure, Our World Enviro-Guide, Teachers Guide to Environmental Resources, and Keep it Clips. The materials distributed on July 30, 2015 included water conservation and stormwater programs that teachers could incorporate into their lesson plans with a brief description of each program. Programs included Major Rivers, Exploring Your Urban Environment, The Incredible Water Journey, Water Drops on a Penny, Enviroscape Watershed Model (Non-point Source Pollution) and Freddy the Fish.

Public Involvement

1.15 Comply with State and Local Public Notice Requirements

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Publish notice of TCEQ determination on NOI and SWMP	1-2	Met Goal
	X	2. Publish notice of Public Meeting if determined to be necessary by TCEQ	1-2	Met Goal
	X	3. Implementation Complete	1-2	Met Goal

1-2. On December 16, 2014, Carrollton received a letter from TCEQ that the technical review of the NOI was complete and that Carrollton must publish the notice of the proposed activity. Carrollton published the Notice of Application for Small Municipal Separate Sewer Systems on Friday, January 9, 2015 in the *Dallas Morning News* (newspaper) for both Dallas and Denton Counties. Carrollton placed a copy of the NOI and SWMP at the Hebron & Josey Library in Denton County on December 1, 2014. The City was not notified to publish a notice for a public meeting. The permit was approved on February 27, 2015.

3. The measure has been fully implemented.

1.16 Public Meetings

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Public meeting to introduce SWMP	90 days after TCEQ's approval of the SWMP	Met Goal
	X	2. A public meeting to update/evaluate SWMP for the next permit term.	December 12, 2018	
		3. Implementation complete	December 12, 2018	

1. A public meeting was held on May 14, 2015 that informed the public about the Storm Water Management Program and introduced several members of our Citizens Advisory Committee. The public meeting notice was posted on the city website event calendar. Nine people attended the meeting, which included citizens, city staff and Citizens Advisory Committee members.

1.17 Illicit Discharge Reporting Line

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Implementation of reporting line and response policy in place.	0	Met Goal

1. The reporting line and the response policy continued to be utilized in this reporting period. The reporting line is listed on the majority of our brochures, giveaways, website, notice of violations and many other items distributed to the public.

1.18 Volunteer Creek and Greenbelt Cleanup, Recycling and Chemical Collection

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. One annual creek clean up or recycling with volunteers	0	Exceeded Goal

1. From August 13, 2013 – September 30, 2014, Carrollton partnered in 7 creek clean-up events as well as 3 Pharmaceutical Collection Events and hosted 1 grease collection event. From October 1, 2014 – September 30, 2015, Carrollton partnered in 16 creek clean-up events, 1 Pharmaceutical Collection Event and hosted 1 grease collection event:
    a. October 26, 2013 – Pharmaceutical Collection Event
    b. November 2, 2013 – Newman Smith Baseball Team cleaned sections of Hutton Branch
    c. November 23, 2013 – JFK Event volunteers cleaned areas at McInnish Park
    d. December 2-3, 2013 – Cooking Oil Collection Event (collected 411 gallons)
    e. January 25-26, 2014 – Community Service Project for school cleaned areas of Furneaux Creek and Woodlake Pond
    f. April 12, 2014 – Panthers Baseball Team cleaned areas at McInnish Park
    g. April 26, 2014 – Pharmaceutical Collection Event (collected 944 pounds)
    h. July 19, 2014 – Scout Team cleaned areas of Furneaux Creek at Crooked Creek
    i. August 16, 2014 – Volunteer cleaned areas of McInnish Park
    j. August 21-September 14, 2014 – volunteers cleaned areas of Furneaux Creek and Woodlake Pond
    k. September 27, 2014 – Pharmaceutical Collection Event
    l. December 1-2, 2014 – Cooking Oil Collection Event (collected 501 gallons)
    m. January 31, 2015 – Newman Smith Baseball Team cleaned sections of Hutton Branch
    n. February 7, 2015 – Volunteer cleaned sections of Hutton Branch
    o. March 28, 2015 – Volunteers cleaned sections of Hutton Branch
    p. April 11, 18, 25, 2015 – Volunteer cleaned sections of Hutton Branch and Furneaux Creek
    q. April 25, 2015 – Volunteer cleaned section of Hutton Branch
    r. July 9, 2015 – Valley View Christian Church cleaned sections of Furneaux Creek
    s. July 26, 27, 29, August 1 & 2, 2015 – Volunteer cleaned sections of Hutton Branch
    t. September 26, 2015 – Valley View Christian Church cleaned sections of Furneaux Creek
    u. September 27, 2015 – Pharmaceutical Collection Event (collected 262 pounds)
    v. September 30, 2015 – Volunteer cleaned sections of Dudley Branch

1.19 Citizens Advisory Committee

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Annual meetings with Citizen Advisory Committee.	0	Met Goal
	X	2. Design and disseminate an electronic survey to Carrollton residents' citizens regarding stormwater issues.	December 12, 2018	On Track

1. The Citizens Advisory Committee had 2 meetings and the Stormwater Management Committee both had meetings in this reporting period.
    a. The Citizens Advisory Committee Meetings were held on March 26, 2014 and April 21, 2015. On March 26, 2014, the meeting agenda included a review of the TCEQ general permit and new activities for Carrollton, with a focus on public education. The committee decided to design and distribute a survey on current storm water pollution prevention items to the public. On April 21, 2015, the meeting agenda included Stormwater permit updates, Stormwater survey review and distribution, the Public Meeting to introduce the SWMP, future project ideas, and upcoming stormwater events.
    b. The Stormwater Management Committee met on April 28, 3014. Topics covered were a background on the role of the committees role in drafting and approving the city's Storm Water Management Plan for the new permit; key changes in the 2013-2018 Permit; Comments or amendments to the draft SWMP; and approval of the Storm
2. The Citizens Advisory Committee completed a draft survey on June 23, 2014. Committee members reviewed the questions and offered suggestions. At the meeting on April 21, 2015, discussions continued on the survey regarding layout, questions, and answers.

MCM 2 Illicit Discharge Detection and Elimination

2.1 Storm Sewer System Map

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Verification of new or newly discovered outfalls.	0	Met Goal
X		2. Map continuously updated as new data is obtained	0	Met Goal

1. Verification of new outfalls in new or redeveloped areas for the storm sewer map continued during from August 13, 2013 – September 30, 2015. All new outfalls (from as-builts) or newly discovered outfalls in the field have been verified either through field inspections and GPS or through as-builts. Outfall verification is completed as soon as practicable.
2. The map was updated as new as-built data was obtained as soon as practicable. Verified maps or GPS points were entered as soon as practicable.

2.2 Storm Water Pollution Control Ordinance and Enforcement Response Guide

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1 Review and revise the Stormwater Pollution Prevention Ordinance	December 15, 2015	Met Goal
X		2. Adoption of ordinance by City Council.	December 15, 2015	On Track
X		3. Establish the Enforcement Response Guide.	December 12, 2016	
		4. Commence implementation of ERG.	December 12, 2017	
X		5. Implementation Complete	December 12, 2017	

1. The Stormwater Pollution Prevention ordinance was reviewed and revised during this reporting period. The ordinance changes will be brought to the City Council in November 2015.
2. Adoption by City Council due by December 15, 2015.
3. Establish the Enforcement Response Guide – December 12, 2016.
4. Commence Implementation of ERG – December 12, 2017.
5. Implementation complete.

2.3 Spill/Emergency Response

BMP	Measurable Goal	Activity	Year Due	Status or Success
X	X	1. Spill response plan in place.	0	Met Goal
	X	2. Review and revise the spill response manual and database.	December 12, 2015	Met Goal

1. Spill response was initiated within 1 hour of receiving notification of the incident, at least 95% of the time when applicable. Environmental Services responded to about 227 illicit discharges, spills or complaints from August 13, 2013 – September 30, 2014 and 254 from October 1, 2014 – September 30, 2015, which included pool discharges from Code Enforcement. The Fire Department responded 100% of the time within 1 hour, usually within 4-6 minutes. Public Works responded to spills or discharges within 1 hour at least 95% of the time.
2. The spill response manual and database were reviewed and revised on November 17, 2014.

2.4 Illicit Discharge Reporting Line

1. This BMP has been discussed in a previous section on the Public Participation and Involvement Minimum Control Measure, as BMP1.17. Achievements in this reporting period are described in said section.

2.5 Construction Plans Review and Site Inspection for Illicit Connections

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. 100 % new construction projects will undergo site plan review and will be inspected to ensure no illicit connections	0	Met Goal
	X	2. Include plan review and site inspections for illicit connections in the appropriate SOP for construction	December 12, 2015	On Track

1. 100% of new construction projects underwent site plan review and were inspected to ensure no illicit connections. Both the review and inspections were performed as regular duties. If an illicit detection was noted on either the plans or during an inspection, the connection had to be corrected before the plans or the inspection was approved.
2. The SOP for Development Services construction plan review and site inspections for illicit connections was completed on July 8, 2015. This SOP will be updated as needed. Engineering is still developing their SOP.

2.6 Illegal Dumping and Litter Control

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. 90% active illegal dumping incidents respond within one hour.	0	Met Goal
	X	2. 100% abatement of illegal dumping incidents	0	Met Goal
	X	3. 100% incidents with identifiable responsible party to be followed by enforcement action	0	Met Goal
	X	4. Clean 40% storm inlets per year	0	Exceeded Goal
	X	5. 9000 pieces of trash collected from the roadways per year	0	Exceeded Goal

1. Response to an active illegal dumping incident occurred within one hour of being notified, at least 90% of the time for this annual report period for those that required an immediate response. There were of 13 illegal dumping cases from August 13, 2013 – September 30, 2014 and 11 illegal dumping cases from October 1, 2014 – September 30, 2015.
2. 100% of the illegal dumpsites were abated or were in the process of being abated in this reporting period.
3. 100% of the illegal dumping incidents with an identifiable responsible party were followed by an enforcement action.
4. 53% of the storm drain inlets were inspected for needing maintenance from August 2013 – September 2014. 43.01% of the storm drain inlets were inspected for needing maintenance from October 2014 – September 2015. Cleaning was based on the inspection results. Code Enforcement had 4,381 trash and debris cases at both residential and commercial properties this reporting period. Animal Services removed 2,477 dead animals in this reporting period.

5. From August 2013 – September 2014, 13,686 pieces of trash and debris were collected and from October 1, 2014 – September 30, 2015, 13,939 pieces of trash and debris were collected from the roads and ditches.

2.7 Liquid Waste Program

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. 100% permitted liquid waste haulers inspected once a year	0	Met Goal
	X	2. 100% permitted liquid waste haulers to submit used tickets monthly.	0	Met Goal
	X	3. 100% identified facilities to use a permitted liquid waste hauler.	0	Met Goal
	X	4. Inventory of septic tanks in the city.	December 12, 2016	Met Goal
	X	5. Develop Procedures to prevent and correct any leaking on-site sewage disposal system.	December 12, 2017	

1. 100% of permitted liquid waste haulers were inspected from August 2013 – September 2015. A letter was mailed 1 month before expiration to get haulers to come in on time. For applicable businesses, trap owners were inspected for proper trip tickets from permitted haulers in the city. A list of permitted liquid waste haulers is available on the website with permit expiration dates at www.cityofcarrollton.com/index.aspx?page=244. At the end of September 2014 there were a total of 101 trucks from 30 companies permitted in Carrollton and at the end of September 2015 there were a total of 103 trucks from 33 companies permitted in Carrollton.
2. 100% of permitted liquid waste haulers submit used tickets monthly. Enforcement actions were taken if they were not being submitted. From August 13, 2013 – September 30, 2014, 3 notices of violation and 4 citations were issued for either not having a permit or not filling out/submitting the trip tickets properly during the year. From October 2014 – September 30, 2015, 2 NOVs were issued.
3. 100% of the identified facilities used a permitted liquid waste hauler. Food establishments grease trip tickets were inspected during each routine food safety inspection to verify that the establishment used a permitted liquid waste hauler. Enforcement actions were taken if an establishment did not use a permitted liquid waste hauler.
4. The city has a list of septic tanks in the city.
5. Develop Procedures to prevent and correct any leaking on-site sewage disposal system.

2.8 Maintenance Program for Sanitary Sewers

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Annual maintenance and inspection of sanitary sewer system.	0	Met Goal
	X	2. Tag high-risk sections of sanitary sewer system for inspection/ maintenance every 30 days (i.e. Maintain 30-day list). Review annually.	0	Met Goal

1. Clean about 200 miles of sewer lines per year. This BMP is being replaced with an equivalent BMP that has the approval of TCEQ's James Gradney, Manager for the Enforcement Division. The number of miles cleaned every year will vary. The number cleaned is on a 5 year cycle. In 2013/2014 61.9 miles, 2014/2015 145 miles, 2015/2016 - 194 miles, 2016/2017 - 172 miles, 2017/2018 - 194 miles, 2018/2019 - 179 miles. This initiative was changed in February 2010. A total of 123.4 miles of sewer lines were cleaned from August 2013 – September 2014 and 150 miles were cleaned from October 2014 – September 2015.
2. Conduct closed-circuit television inspections of 100,000 feet per year. A total of 120,716 feet were inspected August 2013 – September 2014 and 102,998 feet were inspected from October 2014 – September 2015.
3. Smoke and dye testing of 100,000 feet per year. From August 2013 – September 2014 and 162,932 feet were tested and from October 2014 – September 2015, the total feet tested were 103,608.
4. Inspect 2100 manholes per year. The total manholes inspected from August 2013 – September 2014 were 2,837 and from October 2014 – September 2015 were 2145.
5. Repair and/or bring to grade 300 manholes per year. The total manholes repaired or brought to grade from August 2013 – September 2014 were 395 and from October 2014 – September 2015were 321.
6. The 30 day maintenance list was maintained and updated every month. The list had 11 sites by the end of September 2014 and 8 sites by the end of September 2015.
7. Lift stations inspected monthly. At the 19 lift stations, a total of 1,140 inspections were performed from August 2013 – September 2014 and 988 inspections were performed from October 2014 – September 2015.

2.9 Pet Waste Management

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Investigate all (100%) complaints received regarding improper disposal of pet waste	0	Met Goal

1. Animal Services addressed 100% of the complaints received regarding pet waste or unsanitary conditions. A total of 62 complaints

were received and investigated from August 2013 – September 2014 and 29 cases from October 1, 2014 – September 30, 3015.

2.10 Dry Weather Discharge Screening

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Employees or consultants attend the NCTCOG regional dry weather screening protocol training as needed.	0	Met Goal
	X	2. Review and revise if necessary the priority locations for screening.	December 12, 2015	Met Goal
X		3. Review and revise the Dry Weather Field Screening Manual.	December 12, 2015	Met Goal
X		4. Continue Dry Weather Field Screening at the priority locations.	0	Met Goal
		5. Implementation Complete	2	Met Goal

1. Four (4) employees attended the NCTCOG regional Illicit Discharge Detection & Elimination/Dry Weather Screening training on June 8, 2015 for this reporting period. In addition to this, all of the staff members in Environmental Quality went through training on dry weather screening at an outfall in Carrollton on July 23, 2014.
2. The locations for screening were reviewed and revised in June 2015 with 58 outfalls selected to be monitored. Priority locations (outfalls) were identified for monitoring by using the following data:
    a. Number of Spills and Discharges for an area
    b. Selected Water Quality Index Parameters
    c. Outfall Size or the size of the area that drains to an outfall
    d. Age of the Sewer and Water Lines in the City
    e. Land Use

    Once this data was reviewed, it was determined that b, c and e were the only data that was pertinent when selecting the outfalls. The original number of outfalls selected for monitoring was 25. The following is the list of outfalls selected to be monitored from 2010 – February 2015:

Indian Creek:	**Reason for Selection:**	**Site Description:**
OF 423	Oil sheen visible -	West of Creek Valley Middle School & south of residential
OF 425	large outfall; drains large residential area ,	relatively large w/metal bars) between Comanche & Indian Run
OF 434	observed flow during dry weather	Under bridge between Creekvalley & Eisenhower on the south side of Hebron

OF 302	culvert that drains a large area from Eisenhower	corner of Mae "culvert"
OF 443	observed flow during dry weather	between Crystal & Island behind park playground

Furneaux Creek:	**Reason for Selection:**	**Site Description:**
OF 601	outfall for large residential area	Alley behind Rambling Ridge
OF 611	large outfall	End of Oakhill & Chestnut
OF 5061	commercial outfall	north of storage facility on Frankford, hidden by a clump of trees
OF 620	commercial outfall	outfall between Walgreens and stopped up outfall
OF 510 (left)	outfall for large residential area	Irvine and Cemetery Hill
OF 4197 (was listed as OF 510 (right))	outfall for apt complex	Irvine and Cemetery Hill

Hutton Branch:	**Reason for Selection:**	**Site Description:**
OF 1353	commercial outfall	in Thomson Reuter's parking lot
OF 1351	commercial outfall	under trees at Kellway
OF 2298	have not located yet	have not located outfall but will monitor if we find it

Dudley Branch:	**Reason for Selection:**	**Site Description:**
OF 468	Commercial/residential outfall	End of Indian Springs alley
OF 472	residential outfall	end of Silverado
OF 4846	large residential outfall; drains large area	between 2 footbridges east of park north side of creek at the curve for Greenglen
OF 452	large residential outfall; drains large area	Northwest of Raleigh & Old Denton, north side of the channel between Creekview High School and residences
OF 478	outfall for commercial area	Old Denton & Raleigh under bridge on northeast side by Nursing Home

Cooks Branch:	**Reason for Selection:**	**Site Description:**
OF 1121 A (north) & B (south)	2 residential outfalls	Lakeland & Valleywood

VI Channel:	**Reason for Selection:**	**Site Description:**
OF5060	Industrial/Commercial/Residential outfall	Broadway & Randolph - southeast corner
OF4151 (was listed as OF 1096 (A) left)	Industrial/commercial outfall	west of bridge on Monetary
OF2320 (was listed as OF 1096 (B) right)	Industrial/commercial outfall	west of bridge on Monetary
OF 1391	commercial area w/history of illicit discharge	south of Wallace behind B Braun - second outfall from RR tracks

List of Outfalls to be Monitored for DryWeather Screening in June 2015:

Indian Creek:	**Reason for Selection:**	**Site Description:**
OF 4040	Kohl's shopping center OF	north of Kohl's on southeast side of detention area
OF 4041	Outfall for apartment, residential & commercial (Kroger shopping center)	north east side of the detention area opposite of Kohl's outfall
OF 0309	Commercial outfall	northwest side behind the shopping center at Old Denton and Hebron - north outfall
OF 0308	Commercial outfall	northwest side behind the shopping center at Old Denton and Hebron - south outfall
OF 0428	Commercial outfall	Huffines and W. Hebron - across from the daycare on Huffines
OF 0382	Large residential outfall	end of Legacy at Creekside
OF 0379	Large residential outfall	Creekside - northeast of OF0382

Hutton Branch:	Reason for Selection:	Site Description:
OF 4355	Apartment Complex outfall - right	drainage channel for Trinity Crossing Apt
OF 1296	Apartment Complex outfall - left	drainage channel for Trinity Crossing Apt
OF 1279	Residential outfall	along Kelly North side of the channel where HB4 sample is taken
OF 1281	Residential outfall	along Kelly North side of the channel upstream of OF1279
OF 1443	Residential outfall	west of Wentwood and Old Mill Rd - drains Renwick and Wentwood

Cooks Branch:	Reason for Selection:	Site Description:
OF 1118	drains large residential area	Northeast side of channel at Nix and Fyke
OF 1112	Large residential outfall	Southside of Fyke on Farmers Branch Side

VI Channel:	Reason for Selection:	Site Description:
44 outfalls	all industrial/commercial outfalls	Outfalls from Monetary Drive to Surface Water Sampling Site

3. The Dry Weather Field Screening Manual was reviewed and revised on November 14, 2014.
4. From August 2013 – September 2015, dry weather screening was performed in December 2013, July 2014, and February 2015 at the outfalls selected from the previous permit term. Dry Weather Screening was performed from July - September 2015 for the new outfalls selected in June 2015. Dry Weather Screening data is included in Appendix II.

2.11 Household Hazardous Waste Program

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Provide a household hazardous waste disposal program for Carrollton residents.	0	Met Goal

1. The city continued to utilize Waste Management's Household Hazardous Waste program from August 2013 – September 2015. Waste Management's program provided Carrollton's residents with a free door-to-door collection of Household Hazardous Waste.

2.12 Water Main Breaks

BMP	Measurable	Activity	Year Due	Status or Success

	Goal			
X	X	1. Response procedures in place.	0	Met Goal

1. A response was initiated within 1 hour of receiving notification of the water main break 95% of the time. The response procedure is in place and is updated as needed.

2.13 Employee Training for Illicit Discharges

BMP	Measurable Goal	Activity	Year Due	Status or Success
X	X	1. Develop Training Program for all field employees	December 12, 2016	
X	X	2. Train all field employees.	December 12, 2018	

1. An illicit discharge training program developed for all field employees – Due December 12, 2016.
2. Train all field employees December 12, 2018.

MCM 3 Construction Site Storm Water Runoff Control

3.1 Ordinance for Construction Site Erosion and Sediment Controls

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Review and revise the Stormwater and Flood Protection ordinance	December 12, 2015	Met Goal
X		2. Review and revise the SWPPO	December 12, 2015	On Track
X		3. Adoption of ordinance by City Council, publication	December 12, 2015	On Track
X		4. Implement ordinance changes	December 12, 2015	On Track
X		5. Establish the Enforcement Response Guide (ERG)	December 12, 2016	
X		6. Commence the implementation of ERG	December 12,	

			2016	

1. The Stormwater and Flood Protection ordinance was reviewed and revised during this reporting period.
2. The Storm Water Pollution Prevention Ordinance was reviewed and revised during this reporting period.
3. The Stormwater and Flood Protection Ordinance was adopted by the City Council on June 9, 2015 and the publication was on June 14, 2015. The Stormwater Pollution Prevention Ordinance changes will be brought to City Council before December 12, 2015.
4. The Stormwater and Flood Protection Ordinance changes were implemented in June 2015.
5. Establish the Enforcement Response Guide. Due December 12, 2016
6. Commence the implementation of the Enforcement Response Guide. Due December 12, 2016

3.2 Storm Water Pollution Prevention Plan Review and Submission of NOI/CSN

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Engineering and Development Services require copies of either CSN or NOI and SWPPP from all operators disturbing one or more acres of land	0	Met Goal
X		2. Procedures in place to obtain and review NOI and SWP3 of all (100%) construction sites required to obtain a NPDES/TPDES storm water permit	0	Met Goal

1. Engineering and Development Services required copies of either CSN or NOI and SWPPP from all operators disturbing one or more acres of land during this reporting period. The SWPPP and CSN and/or NOI are either retained in Environmental Services or Engineering.
2. Procedures were in place to obtain and review (not approval of) the CSN or NOI and SWP3 of all (100%) construction sites required to obtain a NPDES/TPDES storm water permit throughout this reporting period.

3.3 Construction Site Inspection

BMP	Measurable Goal	Activity	Date Due	Status or Success
	X	1. Conduct inspections of 100% NPDES/TPDES-permitted construction sites.	0	Met Goal
X		2. Develop written procedures for site inspection and enforcement requirements.	December 12, 2015	On Track
X		3. Develop inspection sheet for use during construction site inspections.	December 12, 2015	Met Goal

1. Inspections were conducted for all active construction sites within the city that obtain a NPDES or TPDES construction permit. Engineering or Development Services made sure that erosion control devices were set up prior to land disturbance. Subsequent

inspections were performed almost daily for Engineering with notations made in the inspectors log book if anything was addressed, and in conjunction with other inspection requests for Development Services. Development Services performed 1,035 initial/routine inspections, 576 complaint inspection and 70 final SWPPP inspections from August 13, 2013 – September 30, 2015. Environmental Services conducted 51construction inspections from August 13, 2013 – September 30, 2015.

2. Develop written procedures for site inspection and enforcement requirements. Development Services has a written SOP for construction site inspections and enforcement. Engineering is in the process of writing their SOP.
3. An inspection sheet was developed to use during construction site inspections in October 2013.

3.4 Response to Citizen Complaints

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Maintain "hotline" for construction site concerns	0	Met Goal

1. The present hotline (or an equivalent number) was maintained for public input regarding illicit discharges from construction sites. Initial complaints were usually routed to the respective department to address; Development Services or Engineering first then sent to Environmental Services for enforcement.

3.5 Storm Water Information Package for Construction Site Operators

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Update information package as needed	0	Met Goal
X		2. Implement distribution plan through Engineering and Development Services	0	Met Goal

1. The construction information package was prepared in the first permit term. The packet consists of a summary of the construction requirements, Article 10 of the Storm Water and Flood Protection Ordinance, and the pertinent sections of the new Storm Water Pollution Prevention Ordinance. All information is available on the city's website at http://cityofcarrollton.com/index.aspx?page=970.
2. Distribution of the packet was done during preconstruction meetings by Environmental Services, Engineering or Development Services. Development Services continued to incorporate the packet into their preconstruction manual which is distributed during all preconstruction meetings. The new ordinance was handed out separately since the old ordinance was in the preconstruction manual.

3.6 Preconstruction Meetings

BMP	Measurable Goal	Activity	Year Due	Status or Success

	X	1. Conduct preconstruction meetings with all (100%) applicants to a grading or building permit	0	Met Goal

1. A preconstruction meeting was conducted for each applicant who applied for a grading permit or a building permit in this permit term. One topic discussed in each meeting was erosion and sediment controls, pollution prevention practices, waste management, and TPDES requirements for construction operators (100%).

3.7 Demolitions

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Development Services requires copies of either CSN or NOI and SWPPP from all operators disturbing one or more acres of land, including the larger common plan of development	0	Met Goal
X		3. Obtain and review NOI's and SWPPP of all (100%) demolition sites required to obtain a NPDES/TPDES storm water permit	0	Met Goal

1. Development Services required and reviewed copies of either the CSN or NOI and SWPPP from all operators disturbing one or more acres of land, or that are part of the larger common plan of development, before the demolition could commence.
2. Procedures were still in place to obtain and review NOI's and SWPPP's of all (100%) demolition sites required to obtain a NPDES/TPDES storm water permit before the demolition could commence in this reporting period. Demolition sites less than 1 acre were still required to implement BMPs at the site.

3.8 Employee Training

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Train all employees responsible for the implementation of the construction stormwater program.	December 12, 2015	Met Goal

1. All employees responsible for the implementation of the construction stormwater program have been trained. Training included on the job training, outside training (NCTCOG Stormwater Pollution Prevention Practices During Construction, webcasts) and in-house training (Environmental Services presentations). Employees trained include Building Inspectors, Engineering Inspectors, Plan Review staff, Engineers, and Environmental Quality enforcement staff.
2. During this reporting period, the following trainings occurred:
    - NCTCOG Stormwater Pollution Prevention Practices During Construction workshop – by inspectors and enforcement staff (attended as needed).

- Environmental Services gave a presentation to Development Services on SWPPP review and construction site inspections on October 22, 2013.
- Environmental Services gave a presentation to Engineering staff on stormwater, permits and construction site inspections on September 11, 2014.
- Managing Stormwater on Construction Sites Webcast (SWS Storm Water Solutions) was attended by staff in Development Services, Engineering and Environmental Services on November 19, 2014.
- Environmental Services enforcement staff viewed a Construction Stormwater Awareness Training video on August 3, 2015
- Environmental Services provided a short training to Development Services inspectors on Final Stabilization and Collecting NOTs or CSNs on August 12, 2015.

3.9 Construction Site Inventory

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Inventory of all permitted active public and private construction sites 1 acre or part of a larger common plan of development.	0	Met Goal

1. During this reporting period both Development Services and Engineering maintained a construction site inventory of all active public and private construction sites that are overseen by their respective departments.

MCM 4 Post Construction Storm Water Management in New Development and Redevelopment

4.1 Review of Stormwater and Flood Protection Ordinance and General Design Standards

BMP	Measurable Goal	Activity	Date Due	Status or Success
X		1. Review and update the Stormwater and Flood Protection Ordinance	December 12, 2015	Met Goal
X		2. Yearly review of the General Design Standards	0	Met Goal
X		3. Establish the Enforcement Response Guide	December 12, 2016	
X		4. Commence implementation of the ERG	December 12, 2016	

1. The city began revisions to its Stormwater and Flood Protection Ordinance in 2012. The ordinance revisions were completed approved by the City Council in June 2015.

2. The General Design Standards were reviewed and updated in January 2014 and January 2015. Updates were approved by council in January 2014 and January 2015.
3. Establish the Enforcement Response Guide.
4. Commence the ERG.

4.2 Long-Term Operation and Maintenance Plan for Structural BMPs

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Identify procedures and methods to ensure long-term maintenance of structural BMPs	0	Met Goal
X		2. Implement procedures and methods to ensure long-term maintenance of structural BMPs.	0	Met Goal
	X	3. List of all Structural BMPs to be inspected.	December 12, 2016	
X		4. Receipt of Maintenance Plan for structural controls installed at a site.	December 12, 2017	
X		5. Develop inspection form.	December 12, 2018	
X		6. Begin inspections of structural controls.	December 12, 2018	

1. Procedures and methods were identified to ensure long-term maintenance of privately owned structural BMPs. The city already had procedures and methods in place to ensure long-term maintenance of city structural BMPs. The revisions to the Stormwater and Flood Protection Ordinance also included more specific maintenance procedures for structural BMPs.
2. Implement procedures and methods to ensure long-term maintenance of structural BMPs. The city continued to implement procedures and methods to ensure the long-term maintenance of city structural BMPs.
3. List of all structural BMPs to be inspected.
4. Receipt of maintenance plan for structural controls installed at a site.
5. Develop an inspection form.
6. Begin inspections of structural controls.

4.3 Construction Site Plan Review

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Site plan review of 100% new development/ redevelopment projects	0	

X		2. SOP for Construction Site Plan review	December 12, 2015	On Track

1. Site plan review was performed for 100% of the new development/ redevelopment projects.
2. Development Services developed a SOP for their construction site plan review. The SOP will be updated as needed. Engineering is in the process of developing a SOP for their construction site plan review and it will be completed by December 12, 2015.

4.4 Neighborhood Green Space Preservation

BMP	Measurable Goal	Activity	Year Due	Status or Success
X	X	1.Implementation of green space preservation policies in 100% new projects	0	Met Goal

1. The green space preservation policies applied to 100% of new projects in this reporting term.

4.5 Tree Preservation Ordinance

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Implementation of Tree Preservation Ordinance in 100% new projects	0	Met Goal

1. The Tree Preservation Ordinance continued to be implemented in this reporting period.

4.6 Inspection of Structural BMPs during Construction

1. See section *3.3, Construction Site Inspection.*

4.7 Limited Mowing Height

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. All park areas will be mowed at a frequency to ensure a minimum height of 2.5 inches of ground coverage	0	Met Goal

1. All park areas continued to be mowed at a frequency to ensure a minimum height of 2.5 inches of ground coverage. The lawn mowers were set to cut at a height above 2.5". The city continued with the six "no-mow" or buffer zones in year 5. See 5.1(2) for the list of the no mow areas.

MCM 5 Pollution Prevention/Good Housekeeping for Municipal Operations

5.1 Parks and Open Space Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Mowing crews pick up trash during maintenance of public green areas (approximately 200 days per year). Used mulching mowers. Leaf blowers used to blow clippings back onto grass. Begin to research opportunities to use native species in city facilities.	0	Met Goal
X		2. Buffer zones and no mow zones.	0	Met Goal
X		3. Continue to implement native species landscaping and mowing restrictions where applicable.	0	Met Goal
X		4. Develop schedules for chemical application on public spaces.	December 12, 2016	Exceeded Goal
X		5. Develop a list of pollutants of concern from mowing, chemical application and planting vegetation.	December 12, 2017	
X		6. Continue to implement the Integrated Pest Management Plan.	0	Met Goal
X		7. Proper disposal method for unused pesticides, herbicides and fertilizers.	December 12, 2016	Met Goal
	X	8. Maintain Licensed Pesticide Applicators and Licensed Irrigators	0	Met Goal

1. Mowing crews picked up trash during maintenance of public green areas approximately 200 days for both Parks and Recreation and the Indian Creek Golf Course (until March 2015) in this reporting period. Mulching mowers were used. Leaf blowers were used to blow clippings back onto the grass by both Parks and Indian Creek Golf Course. Due to flooding in Carrollton, the Indian Creek Golf Course closed on March 26, 2015 and remained closed for the remainder of this reporting period. Once the flood waters receded the city and the contractor resumed maintenance of the grounds.
2. Parks and Recreation continued to have six buffer and no mow zones during this reporting period:
    a. Along Eisenhower,
    b. Nob Hill greenbelt,
    c. Blackland Prairie,
    d. Area 6 greenbelt (between Josey and Frankford along Furneaux Creek),
    e. Area 7 (north of Peters Colony and south of Rosemeade), and
    f. Mill Valley Greenbelt Park (north of Keller Springs along Hutton Branch) – changed to Josey Ranch Greenbelt Park (south of Keller Springs along Hutton Branch to Kelly Blvd).

3. Native or adapted plants were incorporated into the landscaping at city facilities when applicable. The city maintained 2 demonstration/educational gardens with native and adaptive plants, one at the Don Cline Pump Station and one at the Josey Ranch Library.
4. Develop schedules for chemical application on public spaces. A standard operating procedure was developed for fertilizer and pesticide application and a schedule for chemical application was developed on March 6, 2014 for the Parks Department which included the application of Pre-emergent, fertilizer, fire ant control, weed control and aquatic treatments.
5. Develop a list of pollutants of concern – December 12, 2017.
6. Continued to implement an Integrated Pest Management Plan.
7. Unused pesticides, herbicides and fertilizers are disposed of properly. The disposal is included in the standard operating procedures for Parks.
8. The City had a total of 10 Licensed Pesticide Applicators and 4 Licensed Irrigators at the end of this reporting period. Parks and Recreation had 5 Licensed Pesticide Applicators, 3 Licensed Irrigators and # Licensed Irrigator Technician from August 2013 – September 2014. Parks and Recreation had 6 Licensed Pesticide Applicators and 3 Licensed Irrigators from October 2014 – September 2015. Due to the continued closure of the Indian Creek Golf Course in March 2015, they only had 1 Licensed Pesticide Applicator and no Licensed Irrigators at the end of September 2015. Environmental Services had two licensed Pesticide Applicators from August 2013- September 2015. Development Services had one Licensed Pesticide Applicator and one Licensed Irrigator from August 2013 – September 2015.

5.2 Street Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Major arterials swept once a month. Including the selected municipal parking lots	0	Met Goal
	X	2. Develop a procedure for street sweeping waste material disposal	December 12, 2016	
X		3. Collect approximately 9000 trash and debris items from roadways and ditches	0	Exceeded Goal
X		4. Review and update erosion and pollution prevention guidelines for road and bridge repair operations.	December 12, 2016	
X		5. Develop list of Pollutants of concern from road and bridge maintenance.	December 12, 2017	

1. Major arterials were swept once a month by an outside vendor. The city verified the sweeping through random inspections throughout the year. From August 2013 – September 2014, 2530.34 curb miles were swept. Due to inclement weather during the second year of this reporting period from October 2014 – September 2015, a few months the street sweeping had to be postponed but were made up during the next month or two. From October 2014 – September 2015, 2590.51 curb miles were swept.

2. Develop a procedure for street sweeping and waste material disposal.
3. A total of 13,686 pieces of trash and debris were collected from the roadways and ditches from August 2013 – September 2014 and 13,939 pieces of trash and debris were collected from the roadways and ditches from October 2014 – September 2015.
4. Review and update the Erosion and pollution prevention guidelines for road and bridge repair operations.
5. Develop a list of pollutants of concern from road and bridge maintenance.

5.3 Fleet Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Weekly inspection/cleaning of maintenance and fueling facilities. Continue to implement spill response and pollution prevention plans (SPCC) at each fueling facility.	0	Met Goal
X		2. Develop a SOP for each of the three maintenance facilities.	December 12, 2017	
X		3. All vehicles and equipment washed in a bays or commercial vehicle wash.	0	Met Goal
X		4. Develop SOP for vehicle and equipment washing	December 12, 2014	Met Goal
X		5. Sand Traps are services as required by city ordinance. All wash bays are under a cover. Continue spill response and pollution prevention plans. Spill kits and signs deployed at all fueling stations. Continue plan to address leaks from vehicles during normal use by a City employee.	0	Met Goal
X		6. Parts and materials stored under cover. Continue recycling program for materials.	0	Met Goal
X		7. Continue to implement plan to address leaks from vehicles during daily use by an employee.	0	Met Goal
X		8. Maintain SWPPP/Annual Inspection of the Central Service Center maintenance yard.	0	Met Goal
	X	9. Quarterly inspections of the ICGC.	0	Met Goal

1. Inspections of maintenance facilities, waste oil tanks and fuel stations were performed at least weekly as normal duties. Indoor floors were swept weekly or as needed and the sweepings were disposed of properly. Spill response and pollution prevention plans for each of the three maintenance facilities had been developed and spill response kits and signs continued to be in place at the facilities. Spill response began within 30 minutes of notice. Quarterly inspections were performed by Facilities for the Indian Creek Golf Course maintenance area, fuel manifests and waste oil.

2. Develop a SOP for each of the three maintenance facilities. December 12, 2017
3. All vehicle washing was done in wash bays or at commercial providers.
4. An SOP was developed for equipment and vehicle washing.
5. From August 2013 – September 2015, all but 2 city maintained grit/sand traps had a variance which allows them to pump every 6 months. The wash bay at the Central Service Center was still being pumped every 3 months and the service bay pit was serviced as needed. Spill prevention and response plans for fueling operations continued to be implemented. Spill kits and signs were still in place at the fueling stations from August 2013 – September 2015.
6. Parts and materials were stored under cover. Shipments to be moved within 24 hours of arrival.
   Fleet and other departments continued to recycle used motor oil, used oil filters, antifreeze, used tires, engine coolant, batteries, cardboard, spent solvent and scrap metal.
7. Procedures developed and implemented during the first permit term continued from August 2013 – September 2015 for addressing leaks from city vehicles during daily use by an employee. Signatures were obtained from August 2013 – September 2015 for new city employees during new employee orientation.
8. A SWPPP was maintained from August 2013 – September 2015 for Fleet Services. The annual inspection was performed on June 26, 2014 and June 5, 2015.
9. Quarterly inspections continued at the ICGC by Facility Services.

5.4 Municipal Buildings and Parking Lots Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Continue to develop and implement a spill response and pollution prevention plan for building and parking lot maintenance (SPCC). Continue research in waste reduction/ recycling options.	0	Met Goal
X		2. Continue inspections of Municipal Buildings and parking lots, including the Public Works yard	0	Met Goal
X		3. Evaluate spill response and pollution prevention plan, adjust plan as necessary	December 12, 2014	Met Goal
X		4. Develop a list of pollutants of concern from municipal buildings and parking lot maintenance	December 12, 2017	

1. The spill response and pollution prevention plan for building and parking lot maintenance continued to be implemented. The SPCC plans were updated in July 2014. The city continued to look for ways to reduce waste or recycle its waste. The city recycled approximately 38.96 tons from August 2013 - September 2015.
2. Inspections continued to be performed of Municipal Buildings and parking lots.
3. The spill response and pollution prevention plans were reviewed and adjusted as necessary in July 2014.
4. Develop a list of pollutants of concern from municipal buildings and parking lot maintenance.

5.5 Storm Sewer System Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Maintain the plan for storm water system maintenance.	0	Met Goal
X		2. Maintain the current schedule for maintenance operations. Revise as necessary.	0	Exceeded Goal
X		3. Continue current procedures to address complaints and other problems. Revise as necessary.	0	Met Goal
	X	4. Continue to inspect lift stations monthly	0	Exceeded Goal
		5. Develop a list of potential problem areas for increased inspections.	December 12, 2017	

1. The storm water system was inspected and the floatables, debris, sediment, and other wastes were removed from inlets and pipes as needed to maintain capacity and to reduce storm water pollution in this reporting period.
2. 53% of the storm sewer system was inspected from August 2013 – September 2014 and 43.01% from October 2014 – September 2015. Complaints and other reported problems were responded to as needed.
3. All channels and ditches were inspected yearly and cleaned as needed. Repairs to channels were done as needed.
4. The storm drain lift stations were inspected almost weekly in this reporting period. The 2 lift stations had a total of 1,976 inspections from August 2013 – September 2015.
5. Develop a list of potential problem areas for increased inspections.

5.6 Waste Reduction of Information Technology and Communications Operations

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Continue recycling of all batteries, cables, aluminum scrap, computer parts, and printer cartridges from IT operations	0	Met Goal
X		2. Continue feasible procedures to collect and recycle batteries from deployed equipment	0	Met Goal

1. All batteries, cables, aluminum scrap, computer parts, and printer cartridges from IT operations were recycled. Xerox employees collected and recycled the print cartridges as they serviced the printers.
2. Procedures are in place and continue to be implemented to collect and recycle batteries from deployed equipment including cell phones, two way radios and uninterruptible power supply. Batteries were brought to Xerox, where they determined if the batteries were still useful or not, then the batteries were placed in a plastic bag and box provided by the recycling company.

5.7 Grease, Sand and Grit Trap Maintenance

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Continue current pumping frequency	0	Met Goal
X		2. Evaluate pumping frequency according to City Ordinance and change as necessary.	0	Met Goal

1-2. All but five city grit and grease traps were serviced every 6 months per the variance from Environmental Services as allowed in the ordinance. The wash bay grit trap at Central Service Center and the grease trap and grit traps (2) at the Indian Creek Golf Course were serviced quarterly (until the golf course closed in March 2015 from the flood) per the city ordinance. The service bay pit at Fire Station #5 is serviced as needed.

5.8 Sand and Deicer Storage Locations

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Limit sand, salt and liquid deicer application to minimum amount necessary to ensure safe driving and walking conditions	0	Met Goal
X		2. Maintain MSDS on site for salt and liquid deicer	0	Met Goal
X		3. Implement appropriate controls for sand, salt and liquid deicer storage.	0	Met Goal
X		4. Identify pollutants of concern from the three materials used.	December 12, 2016	
		5. Develop written Pollution Prevention Measures to reduce the discharge of pollutants form this BMP	December 12, 2017	
		6. Inspect controls for sand, salt and deicer storage.	December 12, 2017	
		7. Implementation Complete	December 12, 2017	

1. Sand, premiere ice melter and liquid deicer were applied at the minimum amount necessary to ensure safe driving and walking conditions, per manufacturer's instructions. Facility Services used 343.75gallons of granular ice melt from August 2013 –September 2015. Public Works used the following amounts:

a. From August 2013 – September 2014 1.395 gallons of deicer product was used and from October 2014 – September 2015 Amount 3,737 gallons of liquid deicer and 12,500 pounds of granular deicer were used.
b. 866.5 cubic yards of sand was used from August 2013 – September 2014 and 230 cubic yards was used from October 2014 – September 2015.

2. The MSDS for liquid deicer, premiere ice melter and sand were maintained.
3. Controls for sand, premiere ice melter and liquid deicer storage were identified per the MSDS. Sand was stored in a storage bin at the Central Service Center. Controls for sand, premiere ice melter and liquid deicer storage have been implemented. Excess sand from the roadways was swept up during the next monthly street sweeping. The deicer product does not require cleanup.
4. Identify pollutants of concern from the three materials used.
5. Develop written Pollution Prevention Measure to reduce the discharge of pollutants from this BMP.
6. Inspect controls for sand, salt and deicer storage.
7. Implementation Complete.

5.9 City Owned Facilities

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Inventory of city owned facilities.	December 12, 2015	Met Goal
X		2. Map of city owned facilities & other stormwater controls.	December 12, 2015	Met Goal
X		3. Assessment of city owned facilities.	December 12, 2016	On Track
X		4. Identification of high priority facilities.	December 12, 2016	On Track
X		5. Development of facility specific SOPs for high priority facilities.	December 12, 2017	
	X	6. Inspection of city facilities.	December 12, 2018	

1. An inventory of city owned facilities and city owned property was completed by the end of this reporting period.
2. Maps of city owned facilities and other stormwater controls was completed by the end of this reporting period and they will be updated as needed. The city maintained a GIS map with all city facilities. City owned properties were added to the maps. Separate maps were created of facilities with structural stormwater controls.
3. The assessment of city owned facilities began in June 2015 with the mapping of city facilities and stormwater controls and will be completed by December 12, 2016.
4. High priority facilities are being identified during the assessment of city facilities and will be completed by December 12, 2016.:

5. Facility specific SOPs for the high priority facilities.
6. Annual inspections for the high priority facilities.

5.10 Structural Control Maintenance and Waste Disposal

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Review, update and log data of the inventory of structural controls	0	Met Goal
X		2. Continue inspection of structural controls and implement maintenance plan.	0	Met Goal

1. Review, update and log data of the inventory of structural controls.
2. Maintenance of the retention and detention ponds or swales was done by Parks and Recreation or a contractor. Maintenance included mowing and trash pick-up. The Public Works Department inspected all of the channels that the city maintains from August 13, 2014 – September 30, 2014 and from October 1, 2014 – September 30, 2015 with maintenance done on an as needed basis.

5.11 New Construction and Land Disturbance

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Comply with TPDES construction storm water permit requirements for projects in which the city meets the definition of operator.	0	Met Goal
X		2. Require contractors of municipally owned construction projects to comply with TPDES construction storm water permit requirements.	0	Met Goal

1 – 2. The City and the contractors for city projects complied with the TPDES permitting requirements for construction sites disturbing one or more acres of land, including the larger common plan of development. All of the SWPPP's for the City's Engineering projects are maintained in the Engineering Department. All other SWPPP's were stored in Environmental Services.

5.12 Contractor Oversight Procedures

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Develop a list of contractors.	December 12, 2015	Met Goal
X	X	2. Contractually require contractors to comply with stormwater control	December	On Track

		measures, good housekeeping practices and facility-specific SOPs.	12, 2015	
X		3. Develop Oversight Procedures	December 12, 2018	
		4. Implementation Complete	December 12, 2018	

1. A list of contractors was developed during this reporting period.
2. All contractors were contractually required to comply with local and state ordinances. Future contracts will contain the language "The Contractor shall implement Best Management Practices (BMPs) and good housekeeping measures to prevent stormwater pollution."
3. Develop Oversight Procedures
4. Implementation complete.

5.13 Fire Fighting Training Activities

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Continue implementing BMPs during training activities	0	Met Goal

1. BMPs continued to be implemented during fire training activities. For impervious surfaces, Fire placed dechlor tablets in the flowing water prior to entering the storm drain during training activities. When possible, the hoses were directed at grassy areas during training. All trucks carry dechlor tablets and use them during fire hydrant flow testing too.

5.14 Employee Storm Water Pollution Prevention Training Program

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Participate in the NCTCOG regional program to identify pollution prevention training materials and/or develop new materials as needed.	0	Met Goal
X		2. Continue training all employees in departments responsible for operations or maintenance functions. Document training.	December 12, 2016 December 12, 2018	

1. Carrollton participated in the NCTCOG regional program to identify pollution prevention training material. A new video was developed by NCTCOG for training for field employees, "Illicit Discharge Detection and Elimination" in October, 2013. We also continued our training for new employees during New Employee Orientation. In March 2015 we switched to a video instead of the

PowerPoint presentation. Construction training can be found in 3.8. Training included:

Date:	Presentation Topic:	Department:	Length	Presenter:
08/14/2013	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
10/22/2013	Construction Site Inspections/Inspection Form	Development Services - Inspectors	1 hr	Krista Pender
10/16/2013	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
12/18/2013	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
02/12/2014	Storm Water, City of Carrollton and YOU	NEO	15 min	Cindy Arias
03/19/2014	Storm Water, City of Carrollton and YOU	NEO	15 min	Cindy Arias
05/14/2014	Storm Water, City of Carrollton and YOU	NEO	15min	Krista Pender
06/18/2014	Storm Water, City of Carrollton and YOU	NEO	15min	Cindy Arias
07/16/2014	Storm Water, City of Carrollton and YOU	NEO	15min	Krista Pender
07/28/2014	MS4 Conference - Industrial Inspection Workshop	Josni Sumedh & Courtney Vanous	8 hrs	MS4 Conference
07/28/2014	MS4 Conference - Construction Site Insp. Workshop	Krista Pender, Ta' Soriaga	8 hrs	MS4 Conference
7/29-8/1/2014	MS4 Conference - various topics	Krista Pender, Ta' Soriaga		MS4 Conference
08/13/2014	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
10/15/2014	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
11/19/2014	Storm Water, City of Carrollton and YOU	NEO	15 min	Krista Pender
12/17/2014	Storm Water, City of Carrollton and YOU	NEO	20min	Krista Pender
01/21/2015	Storm Water, City of Carrollton and YOU	NEO	20 min	Cindy Arias
03/18/2015	High School Video on Stormwater Pollution	NEO *switched from PowerPoint to video	5 min	video by NCTCOG
04/15/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG
05/20/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG
06/08/2015	NCTCOG IDDE & Dry Weather Field Screening Training	Cory Heiple, Courtney Vanous, Gail Smallin, Krista Pender	9am-3:30pm	NCTCOG Cooperative Training Course
06/17/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG
07/15/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG
08/19/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG
09/16/2015	High School Video on Stormwater Pollution	NEO	5 min	video by NCTCOG

2. Training of employees in departments responsible for operations or maintenance functions - December 12, 2016.

MCM 6 Industrial Inspections

6.1 Inspection of Industrial Facilities

BMP	Measurable Goal	Activity	Year Due	Status or Success
	X	1. Annually, inspect 100 industrial facilities.	0	Exceeded Goal
	X	2. Identify industries needing to apply for a TPDES/NPDES permit and require proof of permit coverage within 6 months of identification. Survey to be done every 3 years.	0	Met Goal
	X	3. Implementation complete	0	Met Goal

1. From August 13, 2013 – September 30, 2014, 25 permitted/regulated industries, and 93 industries (identified from the waste survey) were inspected for a total of 118 inspections. From October 1, 2014 – September 30, 2015, 26 permitted industries were inspected 27 times and 121 industries (identified from the waste survey) were inspected for a total of 148.
2. In this reporting period waste surveys were distributed to businesses three years past the date that the last survey was sent and to new facilities as identified by the certificate of occupancies. Throughout the year surveys were handed out to businesses that were discovered in the field that were not in the database.
3. The measurable goal has been fully implemented.

6.2 Inventory/Inspection of Commercial Facilities

BMP	Measurable Goal	Activity	Year Due	Status or Success
X		1. Maintain an inventory of commercial facilities with grease/grit traps	0	Met Goal
	X	2. Conduct one inspection per year for all food establishments	0	Exceeded Goal
	X	3. Conduct at least 25 commercial inspections per year	0	Exceeded Goal
	X	4. Inspect all active grease/grit traps in database once per year	0	Exceeded Goal
	X	5. Implementation complete	0	Met Goal

1. In this reporting period, an inventory was maintained for all commercial facilities with grease/grit traps. The inventory list is continuously updated when new traps are added in the city or when old traps are discovered. Carrollton had 477 grease and grit traps as of September 30, 2014 and had 505 traps on September 30, 2015.

2. At least one inspection was performed for all food establishments which included dumpster areas and outdoor storage areas from August 13, 2013 – September 30, 2014 and from October 1, 2014 – September 30, 2015. Many establishments were inspected multiple times throughout the year.
3. A total of 154 commercial inspections were performed from August 13, 2013 – September 30, 2014 and 180 commercial inspections from October 1, 2014 – September 30, 2015.
4. All active grease/grit traps were inspected at least once, many multiple times, from August 13, 2013 – September 30, 2015.
5. Implementation complete.

Appendix I

Surface Water Monitoring Data

Date:	Sampling Location:	Water Temp (°C)	pH	DO (mg/L)	Conductivity (µS)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	WQI (Based on 5 factors)
01/20/2014	IC1	8.8	8.13	12.3	890	7.25	0.04	0.44	92 - Excellent
01/21/2014	IC2	8.5	8.26	14.4	885	5.81	0.04	1.408	88 - Good
01/21/2014	FC1	9.5	7.91	11.7	736	4.03	0.08	0.176	94 - Excellent
01/16/2014	FC2	8.6	7.87	11.3	618	7.79	0.06	0.264	94 - Excellent
01/16/2014	FC3	7.8	7.92	12.5	599	3.6	0.04	0.176	94 - Excellent
01/16/2014	FC4	8.4	7.84	11.8	897	7.48	0.06	0.264	94 - Excellent
01/16/2014	FC5	8.2	8.11	15	640	1.07	0.04	1.584	90 Good/Excellent
01/20/2014	HB1	10.7	7.37	10.2	617	5.09	0.04	0.264	95 - Excellent
01/17/2014	HB2	5.9	7.76	10.2	670	2.67	0.04	2.2	92 - Excellent
01/17/2014	HB3	6.3	7.91	10.6	461	6.55	0.8	0.088	83 - Good
01/20/2014	HB4	16.9	8.08	14.5	605	1.97	0	3.256	77 - Good
01/20/2014	HB5	11.4	7.81	10.8	648	0.89	0.02	1.672	96 - Excellent
01/21/2014	DB1	9	8.28	12.1	683	6.74	0.08	0.704	91 - Excellent
01/16/2014	DB2	14.5	8.4	13	1260	3.12	0.04	0.264	87 - Good
01/16/2014	DB3	13.7	8.12	11.1	1275	6.62	0.02	0.264	92 - Excellent
01/20/2014	CB1	19.6	9.12	9.6	497	1.53	0.3	0	84 - Good
01/20/2014	VI1	19.8	10.66	26.4	567	2.74	0.1	0	65 - Medium

Date:	Sampling Location:	Water Temp (°C)	pH	DO (mg/L)	Conductivity (µS)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	WQI (Based on 5 factors)
07/19/2014	IC1	30.2	7.82	10.7	319	198	0.66	0.088	60 - Medium
07/09/2014	IC2	27.4	6.19	4.9	800	9.41	0.2	0.352	75 - Good
07/08/2014	FC1	28.6	7.68	7.5	389	5.74	0.08	0.088	95 - Excellent
07/08/2014	FC2	28.5	7.46	6.6	373	4.75	0.1	0.088	93 - Excellent
07/08/2014	FC3	32.6	8.2	11.4	425	4.41	0.06	0	78 - Good

07/08/2014	FC4	29.9	7.93	6.2	526	13.3	0.14	0.264	88 - Good
07/08/2014	FC5	28.5	7.59	7	583	1.81	0.06	0.352	96 - Excellent
07/14/2014	HB1	29.9	7.37	4.7	460	4.37	0.1	0	84 - Good
07/14/2014	HB2	27	7.2	3	712	6.38	0.04	0	74 - Good
07/14/2014	HB3	26.8	7.31	2.4	566	6.56	0.16	0.44	70 - Medium/Good
07/14/2014	HB4	26.7	7.93	7.9	708	3.63	0.06	0.176	94 - Excellent
07/14/2014	HB5	25.5	7.62	5.2	588	1.57	0.12	0.968	86 - Good
07/09/2014	DB1	29.1	6.56	5	616	10.2	0.12	0	80 - Good
07/09/2014	DB2	28.7	6.93	9.4	754	4.14	0.06	0.176	91 - Excellent
07/09/2014	DB3	31.5	6.23	14	924	3.51	0.1	0.44	75 - Good
07/14/2014	CB1	37.5	10.13	8	489	2.08	0.1	0	78 - Good
07/14/2014	VI1	35.5	9.71	17.3	660	5.4	0.24	0	65 - Medium

Date:	Sampling Location:	Water Temp (°C)	pH	DO (mg/L)	Conductivity (µS)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	WQI (Based on 5 factors)
03/23/2015	IC1	20.4	8.07	10	832	15.7	0.12	1.76	88 - Good
03/23/2015	IC2	19.9	8.31	9.2	860	19.9	0.12	2.2	87 - Good
03/23/2015	FC1	18	8.18	9.8	672	10.3	0.16	1.408	90 - Good/Excellent
03/23/2015	FC2	17.4	8.14	8.5	686	6.23	0.04	0.44	91 - Excellent
03/23/2015	FC3	18.8	8.3	9.9	628	5.33	0.04	2.024	90 - Good/Excellent
03/23/2015	FC4	16.9	8.12	9.4	867	13.6	0.1	3.256	88 - Good
03/23/2015	FC5	15.4	8	9.3	729	7.83	0.06	4.4	89 - Good
03/24/2015	HB1	19.7	8.05	9.6	812	4.11	0.1	0.352	93 - Excellent
03/24/2015	HB2	18	8.07	9.8	670	2.8	0.06	2.64	93 - Excellent
03/24/2015	HB3	22.2	8.24	7.8	906	8.32	0.08	0.44	90 - Good/Excellent
03/24/2015	HB4	17.3	8.29	13	652	1.44	0.06	4.7	82 - Good
03/24/2015	HB5	17	7.88	8.7	699	2.77	0.08	3.96	89 - Good

03/23/2015	DB1	17.3	8.32	9.2	620	14.1	0.12	0.616	88 - Good
03/23/2015	DB2	27	8.67	14.2	1139	3.24	0.08	0.616	74 - Good
03/23/2015	DB3	25.6	8.35	18.3	1000	2.85	0.08	0.352	77 - Good
03/24/2015	CB1	26.7	10.06	12.4	373	1.97	0.12	0	66 - Medium
03/24/2015	VI1	23.4	9.04	19.4	825	17.8	0.68	0.352	69 - Medium

Date:	Sampling Location:	Water Temp (°C)	pH	DO (mg/L)	Conductivity (µS)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	WQI (Based on 5 factors)
07/28/2015	IC1	30.9	7.91	5	550	89	0.56	0	70 - Medium/Good
07/28/2015	IC2	29.1	7.79	6.1	912	26.3	0.1	0.264	87 - Good
07/28/2015	FC1A	32.3	7.73	4.7	1001	50.3	0.14	0	78 - Good
07/28/2015	FC2	30.3	7.37	3	752	2.28	0.1	0	75 - Good
07/28/2015	FC3	29.4	8.18	6.4	616	29.1	0.08	0	86 - Good
07/28/2015	FC4	27.3	7.44	3.8	1014	6.75	0.04	0	78 - Good
07/28/2015	FC5	No Sample Due to No Water in the Creek at the Sampling Location							
07/27/2015	HB1	30.2	7.39	4.6	413	52.6	0.36	0	76 - Good
07/27/2015	HB2	30.1	7.36	7.9	890	8.16	0.24	0	92 - Excellent
07/27/2015	HB3	30.6	7.43	6	615	4.61	0.06	0	92 - Excellent
07/27/2015	HB4A	29.2	8.46	7	643	2.75	0.24	0.528	89 - Good
07/27/2015	HB5	26.3	7.63	6.9	653	1.18	0.16	0.88	94 - Excellent
07/28/2015	DB1	30.9	7.51	3.2	492	53.4	0.34	0	65 - Medium
07/28/2015	DB2	28.8	7.57	4.7	1146	5.87	0.12	0	83 - Good
07/28/2015	DB3	34.3	7.74	14.7	1642	3.51	0.08	0	80 - Good
07/27/2015	CB1A	29.6	8.64	13.4	626	1.74	0.18	0.616	74 - Good
07/27/2015	CB2	31.4	7.75	7.2	617	18	0.28	0	89 - Good
07/27/2015	VI1	37.2	8.71	14.4	690	3.66	0.1	0	74 - Good

Appendix II

Surface Water Monitoring Data and Dry Weather Screening Data

Indian Creek:

Surface Water Monitoring

Date:	Location:	Water Temp (°C)	pH	DO (mg/L)	Conductivity (□S)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	Oil Sheen	Trash	Odor	Water Color	WQI
01/20/2014	IC-1	8.8	8.13	12.3	890	7.25	0.04	0.44	no	yes	no	clear/brown	92 - Excellent
07/09/2014	IC-1	30.2	7.82	10.7	319	198	0.66	0.088	no	no	no	cloudy/brown	60 - medium
03/23/2015	IC1	20.4	8.07	10	832	15.7	0.12	1.76	No	no	no	Clear/brown	88 – Good
07/28/2015	IC1	30.9	7.91	5	550	89	0.56	0	no	no	no	cloudy/brown	70 - Medium/Good

Dry Weather Screening:

Outfalls:	OF 423		OF 425		OF 434		OF 302		OF 443	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	12/26/2013 11:45am	12/27/2013 9:50am	12/26/2013 11:40am	12/27/2013 9:45am	12/26/2013 11:20am	12/27/2013 9:27am	12/26/2013 11:10am*	12/27/2013 9:20am*	12/26/2013 10:50am	12/27/2013 8:55am
Flow	None	None	None	None	Medium	Medium	Low	Low	Low	Low
pH (ppm)					8.25	8.04			8.24	7.93
Conductivity (µS)					687	678			831	814
Detergent (ppm)					0	0			0	0
Ammonia Nitrogen (ppm)					0	0			0	0
Water Temp (°C)					16.6	15.6			10.4	8.5
Turbidity (NTU)					0.79	0.78			3.64	3.51

Chlorine (ppm)					0	0			0	0
Color					clear	clear			clear	clear
Odor					none	none			none	none
Sewage					no	no			no	no
Surface Scum					no	no			no	no
Trash					yes	no			no	no
Oil Sheen					no	no			no	no
							*Could Not Get Sample			
Outfalls:	OF 423		OF 425		OF 434		OF 302		OF 443	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	7/21/2014 1:16pm	7/22/2014 12:54pm	7/21/2014 1:11pm	7/22/2014 12:47pm	7/22/2014 12:25pm	7/23/2014 10:02am	7/21/2014 1:02pm	7/22/2014 12:05pm*	7/21/2014 12:42pm	7/22/2014 11:48am
Flow	None	None	None	None	Medium	Medium	None	Low	Low	Low
pH (ppm)					8.14	8.08			8.33	8.24
Conductivity (µS)					743	1061			841	848
Detergent (ppm)					0	0			0	0
Ammonia Nitrogen (ppm)					0	0			0	0
Water Temp (°C)					27.4	27.1			28.5	28.5
Turbidity (NTU)					0.59	0.66			6.76	8.6
Chlorine (ppm)					0	0			0	0
Color					clear	clear			clear	clear

Odor					none	none			None	None
Sewage					no	no			no	no
Surface Scum					no	no			no	no
Trash					no	yes			no	no
Oil Sheen					no	no			no	no
								*could not get sample		
Outfalls:	OF 423		OF 425		OF 434		OF 302		OF 443	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	2/12/2015 11:25am	2/12/2015 4:00pm	2/12/2015 11:33am	2/12/2015 4:10pm	2/12/2015 11:03am	2/12/2015 3:40pm	12/12/2015 10:55am	12/12/2015 3:35pm	2/12/2015 10:35am	2/12/2015 3:10pm
Flow	None	None	None	None	Medium	Medium	None	none	Low	Low
pH (ppm)					8.2	8.25			8.09	8.32
Conductivity (µS)					692	695			855	807
Detergent (ppm)					0	0			0	0
Ammonia Nitrogen (ppm)					0	0			0	0
Water Temp (°C)					16	17.5			10.6	12.9
Turbidity (NTU)					0.7	0.48			16.3	10.8
Chlorine (ppm)					0	0			0	0
Color					clear	clear			clear	clear
Odor					No	No			No	no
Sewage					No	No			No	no
Surface Scum					No	No			no	no

Trash					No	No			No	no
Oil Sheen					No	No			No	no

***New Outfalls in 2015 for Indian Creek:**

Outfalls:	OF4040		OF4041		OF0309		OF0308		OF0428		OF0382		OF0379	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	7/6/15 10:39a	7/6/15 3:07pm	7/6/15 10:38a	7/6/15 3:05pm	7/6/15 11:09a	7/6/15 3:23pm	7/6/15 11:07a	7/6/15 3:21p	7/6/15 11:28a	7/6/15 3:28p	7/6/15 11:15a	7/6/15 3:32pm	7/6/15 11:19a	7/6/15 3:47pm
Flow	None	None	Low	Low	None	None	None	None	None	None	None	Low	None	None
pH (ppm)			7.96	8.1								8.15		
Conductivity (µS)			>1990	>1990								368		
Detergent (ppm)			0	0								0.1		
Ammonia Nitrogen (ppm)			0	0								0		
Water Temp (°F)			27.1	30.1								30.5		
Turbidity (NTU)			6.75	10.09								59.2		
Chlorine (ppm)			0	0								>0,<0.2		
Color			Clear	clear								brownish		
Odor			No	No								No		
Sewage			No	No								No		
Surface Scum			No	No								No		

Trash			No	No								No		
Oil Sheen			No	No								No		

Hutton Branch:

Surface Water Monitoring

Date:	Location:	Water Temp (°C)	pH	DO (mg/ L)	Conductivity (□S)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	Oil Sheen	Trash	Odor	Water Color	WQI
01/20/2014	HB-5	11.4	7.61	10.8	648	0.89	0.02	1.672	no	yes	no	clear	96 - Excellent
07/14/2014	HB-5	25.5	7.62	5.2	588	1.57	0.12	0.968	no	yes	no	clear	86 - Good
03/24/2015	HB-5	17	7.88	8.7	699	2.77	0.08	3.96	No	Yes	No	Clear	89 - Good
07/27/2015	HB-5	26.3	7.63	6.9	653	1.18	0.16	0.88	No	Yes	No	Clear	94 - Excellent

Dry Weather Screening

Outfalls:	OF 1353		OF 1351		OF 2298	
	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
Date/Time:	12/30/2013 10:25am	12:30/2013 2:45pm	12/30/2013 10:38am	12/30/2013 2:48pm	12/30/2013 10:40am	12/30/2013 2:50pm
Flow	None	None	None	None	None	None
pH						
Conductivity (µS)						
Detergent (ppm)						
Ammonia Nitrogen (ppm)						
Water Temp (°C)						

Turbidity (NTU)						
Chlorine (ppm)						
Color						
Odor						
Sewage						
Surface Scum						
Trash						
Oil Sheen						

Outfalls:	OF 1353		OF 1351		OF 2298	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	7/21/2014 9:15am	7/21/2014 3:05pm	7/21/2014 9:21am	7/21/2014 3:23pm	7/21/2014 9:35am	7/21/2014 3:30pm
Flow	None	Low	None	None	None	None
pH		7.83				
Conductivity (µS)		624				
Detergent (ppm)		0				
Ammonia Nitrogen (ppm)		0				
Water Temp (°C)		26.7				
Turbidity (NTU)		1.79				

Chlorine (ppm)		0				
Color		clear				
Odor		none				
Sewage		no				
Surface Scum		no				
Trash		yes				
Oil Sheen		no				

Outfalls:	OF 1353		OF 1351		OF 2298	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	2/10/2015 1:10pm	2/11/2015 10:10am	2/10/2015 1:30pm	2/11/2015 10:17am	2/10/2015 1:20pm	2/11/2015 10:13am
Flow	None	None	None	None	None	None
pH						
Conductivity (µS)						
Detergent (ppm)						
Ammonia Nitrogen (ppm)						
Water Temp (°C)						
Turbidity (NTU)						
Chlorine (ppm)						
Color						

Odor						
Sewage						
Surface Scum						
Trash						
Oil Sheen						

*New Outfalls Dry Weather Screening 2015

Outfalls:	OF4355		OF1296		OF1279		OF1281		OF1443	
	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
Date/Time:	7/6/2015 12:11pm	7/7/2015 10:48am	7/6/2015 12:13pm	7/7/2015 10:49am	7/6/2015 12:39pm	7/7/2015 11:53am	7/6/2015 12:31pm	7/7/2015 11:43am	7/7/2015 11:26am	7/7/2015 3:40pm
Flow	None	None	Low	Low	Low	Low	None	None	Low	Low
pH			7.52	7.9	7.46	7.83			7.84	7.72
Conductivity (µS)			1025	943	673	712			891	880
Detergent (ppm)			0	0	0	0			0	0
Ammonia Nitrogen (ppm)			0	0	0	0			0	0
Water Temp (°F)			27	26.3	29.4	29			26.7	27
Turbidity (NTU)			9.34	7.86	2.8	3.47			0.91	0.73
Chlorine (ppm)			0	0	0	0			0	0
Color			Clear	Clear	Clear	Clear			Clear	Clear
Odor			Musty	No	No	No			No	No
Sewage			No	No	No	No			No	No
Surface			No	No	No	No			No	No

Scum										
Trash			Yes	No	No	No			No	No
Oil Sheen			No	No	No	No			No	No

Cooks Branch:

Surface Water Monitoring

Date	Location	Water Temp (°C)	pH	DO (mg/L)	Conductivity (mS)	Turbidity (NTU)	Total Phosphate (mg/L)	Nitrate (mg/L)	Oil Sheen	Trash	Odor	Water Color	WQI
01/20/2014	CB-1	19.6	9.12	9.6	497	1.53	0.3	0	no	Yes	no	clear	84 - Good
07/14/2014	CB-1	37.5	10.13	8	489	2.08	0.1	0	no	Yes	no	clear	78 - Good
03/24/2015	CB-1	26.7	10.06	12.4	373	1.97	0.12	0	No	yes	no	clear	66- Medium
New Outfall Location													
07/27/2015	CB1A	29.6	8.64	13.4	626	1.74	0.18	0.616	No	No	No	Clear	74 - Good

Dry Weather Screening

Outfalls:	OF1121A (north)		OF1121B (south)	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	12/30/2013 10:53am	12/30/2013 3:04pm	12/30/2013 10:53am	12/30/2014 3:04pm
Flow	Low	None	None	None
pH	8.13			
Conductivity (µS)	441			
Detergent (ppm)	0			

Ammonia Nitrogen (ppm)	0			
Water Temp (°C)	10.2			
Turbidity (NTU)	9.1			
Chlorine (ppm)	0			
Color	clear			
Odor	none			
Sewage	no			
Surface Scum	no			
Trash	no			
Oil Sheen	no			

Outfalls:	OF1121A (north)		OF1121B (south)	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	7/21/2014 2:52pm	7/22/2014 2:16pm	7/21/2014 2:52pm	7/22/2014 2:16pm
Flow	None	None	None	None
pH				
Conductivity (µS)				
Detergent (ppm)				
Ammonia Nitrogen (ppm)				

Water Temp (°C)				
Turbidity (NTU)				
Chlorine (ppm)				
Color				
Odor				
Sewage				
Surface Scum				
Trash				
Oil Sheen				

Outfalls:	OF1121A (north)		OF1121B (south)	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	2/11/2015 11:34am	2/11/2015 3:51pm	2/11/2015 11:34am	2/11/2015 3:52pm
Flow	None	None	None	None
pH				
Conductivity (µS)				
Detergent (ppm)				
Ammonia Nitrogen (ppm)				
Water Temp (°C)				

Turbidity (NTU)				
Chlorine (ppm)				
Color				
Odor				
Sewage				
Surface Scum				
Trash				
Oil Sheen				

*New Outfalls

Outfalls:	OF1118		OF1112	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	7/7/2015 10:28am	7/7/2015 2:52pm	7/7/2015 10:10am	7/7/2015 2:35pm
Flow	Low	Low	Low	Low
pH	8.07	8.16	8.01	8.21
Conductivity (µS)	990	955	1211	1204
Detergent (ppm)	0	0	0	0
Ammonia Nitrogen (ppm)	0	0	0	0
Water Temp (°F)	25.5	25.7	26.9	28
Turbidity (NTU)	0.66	0.29	1.02	0.79

Chlorine (ppm)	0	0	0	0
Color	Clear	Clear	Clear	Clear
Odor	No	No	No	No
Sewage	No	No	No	No
Surface Scum	No	No	No	No
Trash	No	No	No	No
Oil Sheen	No	No	No	No

Valwood Improvement:

Surface Water Monitoring

01/20/2014	VI-1	19.8	10.66	26.4	567	2.74	0.1	0	no	yes	no	clear/green	65 - Medium
07/14/2014	VI-1	35.5	9.71	17.3	660	5.4	0.24	0	no	Yes	no	Clear/green	65 - Medium
03/24/2015	VI-1	23.4	9.04	19.4	825	17.8	0.68	0.352	No	Yes	No	Clear/green	69 - Medium
07/27/2015	VI-1	37.2	8.71	14.4	690	3.66	0.1	0	No	No	No	Clear	74 - Good

Dry Weather Screening:

Outfalls:	OF1391		OF4151 (OF1096 A (left)*		OF2320 (OF1096 B (right)*		OF5060 (OFXXX)	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
	12/30/2013 11:35am	12/30/2013 3:35pm	12/30/2013 12:00pm	12/30/2014 4:00pm	12/30/2013 12:00pm	12/30/2013 4:00pm	12/30/2013 11:21am	12/30/2013 3:22pm
Flow	Low	Low	None	None	None	None	None	None
pH	7	7.25						
Conductivity (µS)	>1990	>1990						
Detergent (ppm)	0	0						

Ammonia Nitrogen (ppm)	0	0						
Water Temp (°C)	10.5	10.1						
Turbidity (NTU)	110	70.6						
Chlorine (ppm)	0	0						
Color	BCS 68	BCS 68						
Odor	no	no						
Sewage	no	no						
Surface Scum	yes	no						
Trash	no	no						
Oil Sheen	no	no						
Outfalls:	OF1391		OF4151 (OF1096 A (left)*		OF2320 (OF1096 B (right)*		OF5060 (OFXXX)	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
	7/21/2014 2:22pm	7/22/2014 1:44pm	7/21/2014 2:37pm	7/22/2014 2:03pm	7/21/2014 2:37pm	7/22/2014 2:03pm	7/21/2014 2:45pm	7/22/2014 2:08pm
Flow	None	None	None	None	None	None	None	None
pH								
Conductivity (µS)								
Detergent (ppm)								
Ammonia Nitrogen (ppm)								

Water Temp (°C)								
Turbidity (NTU)								
Chlorine (ppm)								
Color								
Odor								
Sewage								
Surface Scum								
Trash								
Oil Sheen								
Outfalls:	OF1391		OF4151 (OF1096 A (left)*		OF2320 (OF1096 B (right)*		OF5060 (OFXXX)	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
	2/11/2015 11:11am	2/11/2015 3:23pm	2/11/2015 11:20am	2/11/2015 3:34pm	2/11/2015 11:20am	2/11/2015 3:34pm	2/11/2015 11:27am	2/11/2015 3:42pm
Flow	None	None	None	None	None	None	None	None
pH								
Conductivity (µS)								
Detergent (ppm)								
Ammonia Nitrogen (ppm)								
Water Temp (°C)								

Turbidity (NTU)								
Chlorine (ppm)								
Color								
Odor								
Sewage								
Surface Scum								
Trash								
Oil Sheen								

*New Outfalls

Outfalls:	OF1096		OF4150		OF4152		OF1407		OF1456	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	8/12/2015 11:17am	8/12/2015 4:26pm	8/12/2015 11:22am	8/12/2015 4:26pm	8/12/2015 11:43am	8/13/2015 11:42am	8/12/2015 11:55am	8/13/2015 11:42am	8/12/2015 11:55am	8/13/2015 11:49am
Flow	None	None	Low	Low	Low	Low	Low	None	Non	None
pH			7.21	7.82	7.61	7.54	7.32			
Conductivity (µS)			361	337	591	585	416			
Detergent (ppm)			0	0	0	0	0			
Ammonia Nitrogen (ppm)			0	0	0	0	0			
Water Temp (°F)			30	30	30.1	30.2	29.4			
Turbidity (NTU)			5.72	6.3	2.93	2.85	14.9			

Chlorine (ppm)			0	0	0	0	0			
Color			Clear	Clear	Clear	Clear	Clear			
Odor			No	No	No	No	No			
Sewage			No	No	No	No	No			
Surface Scum			Yes	Yes	Yes	Yes	Yes			
Trash			No	No	No	No	No			
Oil Sheen			No	No	No	No	No			

Outfalls:	OFOF1457		OF1458		OF1459		OF4156		OF4157	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	8/12/2015 12:14pm	8/13/2015 11:49am	8/12/2015 11:55am	8/13/2015 11:52am	8/12/2015 12:16pm	8/13/2015 12:04pm	8/12/2015 12:26pm	8/13/2015 12:04pm	8/12/2015 12:50pm	8/13/2015 12:07pm
Flow	None	None	None	None	None	None	Low	Low	None	None
pH							10.4	10.78		
Conductivity (µS)							463	439		
Detergent (ppm)							>0.2	0.1		
Ammonia Nitrogen (ppm)							>0, <1	>0, <1		
Water Temp (°F)							33	32		
Turbidity (NTU)							4.14	4.69		
Chlorine (ppm)							0	0		

Color							BCS97	BCS 97		
Odor							Sewage	Sewage		
Sewage							No	No		
Surface Scum							No	No		
Trash							No	No		
Oil Sheen							No	No		

Outfalls:	OF4161		OF4162		OF4160		OF1399		OF1398	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	8/12/2015 12:51pm	8/13/2015 12:09pm	8/12/2015 12:51m	8/13/2015 12:09pm	8/12/2015 12:52pm	8/13/2015 12:09pm	8/12/2015 12:53pm	8/13/2015 12:23pm	8/12/2015 12:2pm	8/13/2015 12:23pm
Flow	None	None	None	None	None	None	None	None	None	None
pH										
Conductivity (µS)										
Detergent (ppm)										
Ammonia Nitrogen (ppm)										
Water Temp (°F)										
Turbidity (NTU)										
Chlorine (ppm)										
Color										
Odor										
Sewage										

Surface Scum										
Trash										
Oil Sheen										

Outfalls:	OF1400		OF4159		OF4158		OF1401		OF2272	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	9/1/2015 9:56am	9/1/2015 2:53pm	9/1/2015 9:59am	9/1/2015 2:53pm	9/1/2015 9:59am	9/1/2015 2:54pm	9/1/2015 10:01am	9/1/2015 2:55pm	9/1/2015 10:02am	9/1/2015 2:55pm
Flow	None	None	None	None	None	None	None	None	None	None
pH										
Conductivity (µS)										
Detergent (ppm)										
Ammonia Nitrogen (ppm)										
Water Temp (°F)										
Turbidity (NTU)										
Chlorine (ppm)										
Color										
Odor										
Sewage										
Surface Scum										
Trash										

Oil Sheen										

Outfalls:	OF2289		OF1402		OF2361		OF2288		OF4171	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	9/1/2015 10:03am	9/1/2015 2:56pm	9/1/2015 10:04am	9/1/2015 2:56pm	9/1/2015 10:04am	9/1/2015 2:56pm	9/1/2015 10:06am	9/1/2015 2:56pm	9/1/2015 10:10am	9/1/2015 2:53pm
Flow	None	None	None	None	None	None	None	None	None	None
pH										
Conductivity (µS)										
Detergent (ppm)										
Ammonia Nitrogen (ppm)										
Water Temp (°F)										
Turbidity (NTU)										
Chlorine (ppm)										
Color										
Odor										
Sewage										
Surface Scum										
Trash										
Oil Sheen										

Outfalls:	OF1414	OF4172	OF1413	OF1411	OF4173

	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
Date/Time:	9/1/2015 10:10am	9/1/2015 3:00pm	9/1/2015 10:10am	9/1/2015 2:57pm	9/1/2015 10:35am	9/1/2015 3:15pm	9/1/2015 10:36am	9/1/2015 3:16pm	9/1/2015 10:41am	9/1/2015 3:18pm
Flow	Low	Low	None	None	None	None	None	None	None	None
pH	7.91	8.29								
Conductivity (µS)	576	577								
Detergent (ppm)	0.1	0.1								
Ammonia Nitrogen (ppm)	0	0								
Water Temp (°F)	25	25.6								
Turbidity (NTU)	2.34	2.9								
Chlorine (ppm)	0	0								
Color	BCS36	BCS36								
Odor	No	No								
Sewage	No	No								
Surface Scum	No	No								
Trash	No	No								
Oil Sheen	No	No								

Outfalls:	OF1412		OF1451		OF1391		OF4176		OF4177	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**

	9/1/2015 10:41am	9/1/2015 3:18pm	9/1/2015 11:01am	9/1/2015 3:22pm	9/1/2015 11:11am	9/1/2015 3:25pm	9/1/2015 11:11am	9/1/2015 3:26pm	9/1/2015 11:14am	9/1/2015 3:26pm
Flow	None	None	None	None	None	None	None	None	None	None
pH										
Conductivity (µS)										
Detergent (ppm)										
Ammonia Nitrogen (ppm)										
Water Temp (°F)										
Turbidity (NTU)										
Chlorine (ppm)										
Color										
Odor										
Sewage										
Surface Scum										
Trash										
Oil Sheen										

Outfalls:	OF2321		OF1453		OF1392		OF4174		OF4175	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	9/1/2015 11:19am	9/1/2015 3:28pm	9/1/2015 11:19am	9/1/2015 3:30pm	9/1/2015 11:24am	9/1/2015 3:32pm	9/1/2015 11:24am	9/1/2015 3:31pm	9/1/2015 11:38am	9/1/2015 3:46pm

Flow	Low	Low	None	None	None	None	None	None	None	None
pH	7.77	7.84								
Conductivity (µS)	1799	1775								
Detergent (ppm)	0	0								
Ammonia Nitrogen (ppm)	0	0								
Water Temp (°F)	27.1	29.4								
Turbidity (NTU)	1.5	2.22								
Chlorine (ppm)	0	0								
Color	Clear	Clear								
Odor	No	No								
Sewage	No	No								
Surface Scum	Yes	Yes								
Trash	No	No								
Oil Sheen	No	No								

Outfalls:	OF1454		OF2286		OF2295		OF1455	
	1st Visit	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
Date/Time:	9/1/2015 11:38am	9/1/2015 3:46pm	9/1/2015 11:52am	9/1/2015 3:52pm	9/1/2015 12:08pm	9/1/2015 4:09pm	9/1/2015 3:33pm	9/2/2015 12:00pm
Flow	None	None	Low	None	None	None	None	None
pH			8.01					

Conductivity (µS)			429					
Detergent (ppm)			0.3					
Ammonia Nitrogen (ppm)			0					
Water Temp (°F)			29.4					
Turbidity (NTU)			17.9					
Chlorine (ppm)			0					
Color			BCS39					
Odor			musty					
Sewage			No					
Surface Scum			No					
Trash			No					
Oil Sheen			No					

Furneaux Creek

Surface Water Monitoring:

01/16/2014	FC-3	7.8	7.92	12.5	599	3.6	0.04	0.176	no	no	no	clear/brown	94 - Excellent
07/08/2014	FC-3	32.6	8.2	11.4	425	4.41	0.06	0	no	no	no	clear	78 - Good

Dry Weather Screening

Outfalls:	OF601		OF611		OF5061 (OFXXX)*		OF620		OF510 (left)		OF4197 (OF510 (right))*	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit

	12/26/13 12:00pm	12/27/13 10:02am	12/26/13 12:20pm	12/27/13 10:20am	12/26/13 12:35pm	12/27/13 10:37am	12/26/13 12:40pm	12/27/13 10:41am	12/30/13 9:40am	12/30/13 2:07pm	12/30/13 9:55am	12/30/13 2:16pm
Flow	Low	Low	Low	Low	None	None	None	None	Low	Low	Low	Low
pH	8.24	8.26	8.4	8.32					7.59	7.86	7.88	7.97
Conductivity (µS)	>1990	>1990	1312	1359					>1990	>1990	1789	1804
Detergent (ppm)	0	0	0	0					0	0	0	0
Ammonia Nitrogen (ppm)	0	0	0	0					0	0	0	0
Water Temp (°C)	10.5	9.8	10.4	9.3					9	9	7	7.9
Turbidity (NTU)	0.6	0.63	5.06	1.2					8.99	5.08	11.4	17.6
Chlorine (ppm)	0	0	0	0					0	0	0	0
Color	clear	clear	clear	clear					clear	clear	clear	clear
Odor	none	none	none	none					none	none	none	none
Sewage	no	no	no	no					no	no	no	no
Surface Scum	no	no	no	no					no	no	no	no
Trash	no	no	yes	yes					no	no	no	no
Oil Sheen	no	no	no	no					no	no	no	no
Outfalls:	OF601		OF611		OF5061 (OFXXX)*		OF620		OF510 (left)		OF4197 (OF510 (right))*	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	7/21/2014 10:10am	7/21/2014 3:43pm	7/21/2014 10:15am	7/21/2014 3:48pm	7/21/2014 10:18am	7/21/2014 3:51pm	7/21/2014 10:42am	7/21/2014 4:13pm	7/21/2014 11:15am	7/22/2014 10:14am	07/21/2014 11:13am	7/22/2014

												10:33am
Flow	None	None	None	None	Low	Low	None	None	Low	Low	None	Low
pH					7.35	8.5			8.01	7.62		7.82
Conductivity (µS)					1196	1339			1803	1547		682
Detergent (ppm)					0	0			>12	>4		0
Ammonia Nitrogen (ppm)					0	0			2	1		0
Water Temp (°C)					25.1	27			25.6	26.7		26.3
Turbidity (NTU)					1.42	2.63			82.7	14.1		1.99
Chlorine (ppm)					0	0			0	0		0
Color					clear	clear			cloudy/ white	BCS 36		clear
Odor					no	no			no	no		no
Sewage					no	no			no	no		no
Surface Scum					no	no			no	no		no
Trash					yes	yes			yes	yes		no
Oil Sheen					no	no			no	no		no
Outfalls:	OF601		OF611		OF5061 (OFXXX)*		OF620		OF510 (left)		OF4197 (OF510 (right))*	
Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit

	2/10/2015 2:05pm	2/11/2015 10:31am	2/10/2015 2:10pm	2/11/2015 10:34am	2/10/2015 2:35pm	2/11/2015 10:50am	2/10/2015 2:55pm	2/11/2015 10:55am	2/10/2015 3:20pm	2/11/2015 2:12pm	2/10/2015 3:05pm	2/11/2015 2:00pm
Flow	None	None	Medium	Low	None	None	None	None	Medium	Medium	Low	Low
pH			8.14	8.1					7.61	7.68	8.23	8.22
Conductivity (µS)			1498	1310					>1990	>1990	1754	602
Detergent (ppm)			0	0					0	0	0	0
Ammonia Nitrogen (ppm)			0	0					0	0	0	0
Water Temp (°C)			15.4	14.2					15.7	15.7	15.1	15.2
Turbidity (NTU)			2.93	2.42					16	6.46	1.14	0.73
Chlorine (ppm)			0	0					0	0	0	0
Color			Clear	Clear					Clear	Clear	Clear	Clear
Odor			No	No					No	No	No	No
Sewage			No	No					No	No	No	No
Surface Scum			No	No					Yes	Yes	No	No
Trash			No	No					Yes	Yes	No	No
Oil Sheen			No	No					No	No	No	No

Dudley Branch:

Surface Water Monitoring

Date:	**Location**	**Water Temp (°C)**	**pH**	**DO (mg/L)**	**Conductivity (mS)**	**Turbidity (NTU)**	**Total Phosphate (mg/L)**	**Nitrate (mg/L)**	**Oil Sheen**	**Trash**	**Odor**	**Water Color**	**WQI**

01/21/2014	DB-1	9	8.28	12.1	683	6.74	0.08	0.704	no	no	no	brown	91 - Excellent
07/09/2014	DB-1	29.1	6.56	5	616	10.2	0.12	0	no	no	no	cloudy green	80 - Good

Dry Weather Screening

Outfalls:	OF478		OF452		OF4846		OF472		OF468	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
	12/26/2013 9:50am	12/26/2013 2:13pm	12/26/2013 9:55am	12/26/2013 2:16pm	12/26/2013 10:15am	12/26/2013 2:40pm	12/26/2013 10:22am	12/26/2013 4:00pm	12/26/2013 10:25am	12/26/2013 3:45pm
Flow	None	None	Medium	Medium	None	None	None	None	Low	Low
pH			7.63	8.23					7.86	8.07
Conductivity (µS)			513	523					679	703
Detergent (ppm)			0	0					0	0
Ammonia Nitrogen (ppm)			0	0					0	0
Water Temp (°C)			12.4	13.7					8.2	10.8
Turbidity (NTU)			2.78	1.3					1.37	0.93
Chlorine (ppm)			0	0.4					0	0
Color			clear	clear					clear	clear
Odor			no	no					No	No
Sewage			no	no					No	No
Surface Scum			no	no					No	No
Trash			no	no					Yes	Yes

Oil Sheen			no	no					No	No
Outfalls:	OF478		OF452		OF4846		OF472		OF468	
Date/Time:	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**	**1st Visit**	**2nd Visit**
	7/21/2014 12:03pm	7/21/2014 4:25pm	7/21/2014 12:05pm	7/21/2014 4:31pm	7/21/2014 12:13pm	7/22/2014 11:19am	7/21/2014 12:36pm	7/22/2014 11:42am	7/21/2014 12:19am	7/22/2014 11:25am
Flow	None	None	None	None	None	None	None	None	Low	Low
pH									7.88	7.72
Conductivity (µS)									713	699
Detergent (ppm)									0	0
Ammonia Nitrogen (ppm)									0	0
Water Temp (°C)									25.3	25.5
Turbidity (NTU)										2.61
Chlorine (ppm)									0	0
Color									clear	clear
Odor									no	no
Sewage									no	no
Surface Scum									no	no
Trash									yes	yes
Oil Sheen									no	no
Outfalls:	OF478		OF452		OF4846		OF472		OF468	

Date/Time:	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit	1st Visit	2nd Visit
	2/10/2015 4:20pm	2/11/2015 2:30pm	2/10/2015 4:15pm	2/11/2015 2:33pm	2/10/2015 3:45pm	2/11/2015 2:45pm	2/10/2015 4:08pm	2/11/2015 3:07pm	2/10/2015 3:52pm	2/11/2015 2:50pm
Flow	None	None	None	None	None	None	None	None	Low	Low
pH									7.96	7.91
Conductivity (µS)									705	709
Detergent (ppm)									0	0
Ammonia Nitrogen (ppm)									0	0
Water Temp (°C)									14.2	13.7
Turbidity (NTU)									2.28	1.28
Chlorine (ppm)									0	0
Color									Clear	Clear
Odor									No	No
Sewage									No	No
Surface Scum									Yes	Yes
Trash									Yes	Yes
Oil Sheen									No	No

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.

I further certify that I am authorized under **30 Texas Administrative Code 305.44** to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Name (printed): _____Matthew Marchant_____ Title: _____Mayor, City of Carrollton_____

Signature: _____ Date: _____