Permit
No::
: STW /
/ TXR040278
RP

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

## A. General Information N -Mailing Address: Engineering Department, City of Rockwall, TX; 385 S. Goliad; Rockwall, TX 75087 Is the named permittee relying on another entity/ies to satisfy some of its permit obligations? Contact Name: Timothy M. Tumulty, P.E Name of MS4 / Permittee: City of Rockwall, Texas If Yes, provide the name(s) of other entity/ies and an explanation of their responsibilities (add more spaces or pages if needed): E-mail Address: ttumulty@rockwall.com Permit No. TXR040278 (CN60063; RN105577878) Annual Report Period: August 13, 2013 to December 31, 2014 (Year 1) Telephone Number: 972-771-7746 MS4 Operator Level: 2 Yes No X

ω 4. Is this a system-wide annual report including information for all permittees? Explanation, if any 5. Has a copy of this annual report been submitted to the TCEQ Regional Office? Is the named permittee sharing a SWMP with other entities? Name and Explanation: If "Yes," list all associated permit numbers and permittee names (add additional spaces or pages if needed): Permit Number: Permittee: × Yes Yes Yes × No × S No

					,B
4. The MS4 has conducted analytical monitoring of storm water quality. Explain below or attach a summary to submit along with any monitoring pollutants to the maximum extent practicable. Be sure to include a disc	3. A receiving water body is newly listed as impaired or a TMDL has been established.	2. The MS4 has annexed lands since obtaining permit coverage	<ul> <li>c. If Yes to the above, indicate whether an NOC (or letter) has been submitted to docum SWMP as required by the general permit. (Note that if an NOC is required, it must be submitted to the address shown on the NOC. Do not attach the original NOC form to this report.)</li> </ul>	b. If Yes to the above, has the TCEQ already approved the original SWMP?	<ul> <li>B. SWMP Modifications and Additional Information.</li> <li>Include a brief explanation if you check "Yes" to any of the following statements.</li> <li>1. a. Changes have been made or are proposed to the SWMP since the NOI or annual report, including changes in response to TCEQ's review.</li> </ul>
4. The MS4 has conducted analytical monitoring of storm water quality. Yes X No Explain below or attach a summary to submit along with any monitoring data used to evaluate the success of the SWMP at reducing pollutants to the maximum extent practicable. Be sure to include a discussion of results.	ed or a TMDL has been establishedYes No	rmit coverageYesX_No	If Yes to the above, indicate whether an NOC (or letter) has been submitted to document the changes to the approved SWMP as required by the general permit. (Note that if an NOC is required, it must be submitted to the address shown on the NOC. Do not attach the original NOC Yes	pproved the original SWMP? Yes No	of the following statements. the SWMP since the NOI or the lastYesNo to TCEQ's review.
ducing					

# C. Narrative Provisions.

1. Provide information on the status of complying with permit conditions:

		×	Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements. Edwards Aquifer limitations, compliance history, etc.)
required by the permit (as possible)		2	requirements.
We are tracking the items as		×	Demitted is according to a compliance with record/seening and reporting
			approved by the TCEQ.
We are following the permit.		×	Permittee is currently in compliance with the SWMP as submitted to and
Explain	NO	Yes	
Evalain	2	<	

N. Provide a general assessment of the appropriateness of the selected BMPs:

for reducing the discharge of pollutants in storm water? Has the permittee determined that any of the selected BMPs are not appropriate

Yes X No

Provide explanation:

At this time all the BMPs seem to be appropriate.

ω Describe progress towards reducing the discharge of pollutants to the maximum extent practicable (MEP). Summarize any information used (such as monitoring data) to evaluate reductions in the discharge of pollutants. Use a narrative description or table as appropriate:

(Yes / No / Explain)					
ts Does BMP Demonstrate a Direct Reduction in Pollutants?	ity Units	Quantity	Parameter	BMP	MCM

Or, provide explanation below:

as visitors. material (very successful household hazardous waste day). The website has helped with getting information to residents as well The construction related items appear to be working. The public information program has raised awareness about hazardous

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 program is going well.

- S 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 site notices: 28
- <u>ი</u> Does the permittee utilize the 7<sup>th</sup> MCM related to construction?

Yes

S

If Yes, then provide the following information:

- The number of municipal construction activities authorized under this general permit:
- The total number of acres disturbed for municipal construction projects:

a

Though the 7<sup>th</sup> MCM is optional, this must be requested on the NOI or on a NOC and approved by the TCEQ. b.

7. Describe any proposed changes to the SWMP in the coming reporting year.

None

- œ Describe any activities planned for the next permit year / reporting cycle.
- a. Complete all of our Year 2 BMPs per SWMP.
- b. Conduct two outreach programs through materials being handed out at City/County activities and through the water bill
- c. Complete outlines for public education for industrial, commercial, and municipal employees
- d. Conduct Hazardous Waste Day on April 18, 2015
- e. Install the first set of inlet markers on 25% of the inlets in the City (year ahead ho f schedule)

described in the instructions. Each MCM, but not necessarily each BMP, must include the measurable goals described in the SWMP. For a shared SWMP, include the name of the responsible MS4 operator(s) in the "BMP" column. (Though an MS4 is not required to and during the first permit year if they are described in the initial annual report.) D. Storm Water Management Program Status. Provide the status of every BMP and measurable goal listed in the SWMP, as has been done to date, even if the SWMP has not yet been approved. The MS4 will receive credit for all BMPs implemented prior to implement BMPs until the initial SWMP is approved by the TCEQ, the MS4's initial annual report should include a description of what

MCM(s)	1. Public	and Outreach				
BMP	1.1 Compliance with state	requirements when implementing a public involvement/participation	1.2 Support and Participate in the Regional Storm Water Management	NCTCOG educational materials for public outreach activities	1.3 Promote Texas SmartScape to Homeowners or other group(s) of the population.	1.3 Promote Texas SmartScape to Homeowners or other group(s) of the population.
<b>Milestones of Year 1</b>	Provide public notice		Conducted 2 outreach campaigns.		Conduct two outreach campaigns.	Review the current landscape ordinance for commercial projects to utilize native or adaptive plants.
New or Revised						
Start Date	8-2014		11- 2013		Year 1	Year 1
Status / Completion Date (completed, in progress, not started)	County News on 8-14-2014	Posted new SWMP on City website Complete	"Cease the Grease" flyer was distributed to 2,569 people via e-news on 11-20-2013 and 8-22-2014 "Cease the Grease" flyer was mailed	to 14,800 nouseriolus as a water bin insert in 09-2014. See appendix Used City cable channel and City website to publicize grease and grass clipping disposal. Complete	Link to the SmartScape website on City website. Complete. Participated with Rockwall County "Save your landscape for better days" Conference on 8-9-2014. See appendix	Current landscape ordinance was reviewed and was determined to not need modification. Complete

# TABLE 1 – BMP Status

							1. Public Education and Outreach	MCM(s)
1.8 Municipal Employee Training	1.8 Municipal Employee Training	1.8 Municipal Employee Training	1.7 Education for Elected Officials		1.6 City Storm Water Webpage via NCTCOG	1.5. Construction/Post- Construction Handout	1.4 Industrial and Commercial Education	BMP
Send Engineering Department personnel to NCTCOG Storm Water Prevention Course.	Training received by City employees	Develop an outline of the information to be communicated for a 5 yr period	Provide information to City Council on storm water requirements and City's MS4 program		Utilize NCTCOG tracking number of hits	City's "Construction Notes" reviewed and distribute at pre- construction meetings	Develop an outline of the information to be communicated for a 5 year period	Milestones of Year 1
								New or Revised
Year 1	Year 1	Year 1	Year 1		Year 1	Year 1	Year 1	Start Date
for certificates. On-going.	52 employees watched storm vare Pollution Prevention DVD 9-18-2013.	In progress	Information given to City Council 4-4- 2014 On-going every year	On-going.	Rockwall had one second of the from last year. See appendix NCTCOG Public Education Activity Report	no revisions are needed. Construction notes were distributed to contractors in the pre-con meeting. Complete	In progress	Status / Completion Date (completed, in progress, not started)

		Elimination	2. Illicit Discharge Detection and			1. Public Education and Outreach	MCM(s)
2.2 Municipal Employee Training (Field Staff)	2.2 Municipal Employee Training (Field Staff)	2.2 Municipal Employee Training (Field Staff)	2.1. Storm Sewer Map	1.10 Illicit Discharge	1.9 Storm Inlet Markers	1.9 Storm Inlet Markers	BMP
Develop an outline of the information to be communicated for a 5 yr period	Obtain Storm Water Inspection Certificate for an engineering inspector.	Send Engineering Department personnel to NCTCOG Storm Water Prevention Course.	Update Storm Sewer Map with new outfalls	Provide the public with a means to report discharge activities	Install inlet markers	Storm inlet marker program was developed and purchased inlet markers	Milestones of Year 1
	New				Revised		New or Revised
Year 1	Year 1	Year 1	Year 1	Year I	Year 2	Year 1	Start Date
In progress	Inspector received Certification in Storm Water Inspection 4-2014. Complete. See appendix	Sent two in Year 1. See appendix ion certificates. Complete	Updated Storm Sewer Outlan Map with new outfalls constructed within Year 1see attached map. Complete	website/CRM Trak. Nine tips were received and addressed from websitesee appendix. On-going	25% of the inlet markers will be installed on City inlets. Ahead of schedule	The City plans to install 25% of the City's inlet markers every year. City has 3,377 inlets and purchased 25% (see attachment) of the markers for year 1. 25% of the inlet markers will be installed each year starting in Year 2. to Year 5Complete. See appendix	Status / Completion Date (completed, in progress, not started)

					3. Illicit Discharge Detection and	MCM(s)
2.7 Illicit Discharge/Dumping Response Plan	2.6 Identify Allowable Non-storm Water Discharges	2.6 Identify Allowable Non-storm Water Discharges	2.5 Detecting and Removing Illicit Discharges	2.4. Illicit Discharge Ordinance	2.3 Industrial/Commercial Storm Water Quality Information	BMP
Direct the public to report any illegal dumping or illicit discharge.	Posted the Storm Water Management Program document on web page (included the allowable non- storm sewer discharges).	Reviewed the impact of the current allowable non-storm water discharges in the general permit and determined that no additions or revisions were needed.	No changes to City ordinance is needed at this time.	No changes to City ordinance is needed at this time.	Develop an outline of the information to be communicated for a 5 yr period	Milestones of Year
						New or Revised
Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Start Date
Dumplementation of the Discretion of Dumping Response Plan was started. Provided a 24 hour phone number and illicit discharge reporting options on the City Website. Complete	The list of allowable non-storm water discharges is included in our Storm Water Management Program document. Complete.	No revisions to allowable discharges. Complete.	City ordinance relating to mich discharges were reviewed and determined to not need any revision. Complete.	City ordinance relating to illicit discharges were reviewed and determined to not need any revision. Complete.	In progress	Status / Completion Date (completed, in progress, not started)

3. Construction Site Storm Water Runoff Control					3. Illicit Discharge Detection and Elimination	MCM(s)
3.1 NCTCOG iSWM Design Manual	2.9 Prevention of Illicit Discharges	2.9 Prevention of Illicit Discharges	2.9 Prevention of Illicit Discharges	2.8 On-Site Sewage Disposal System	2.8 On-Site Sewage Disposal System	BMP
Staff adopted sections of the iSWM Manual for use by the City with site development activities.	City provides a monthly curb- side pickup for bulk items, such as tree limbs and leaves.	Recycling materials (newspaper, magazines and clear plastic bottles) are collected weekly and transported to a material recovery facility.	Held a nazardous waste dog to collection of household hazardous waste in April	Implement the prevention and correction plan.	Review procedures to prevent and correct leaking of on-site sewage disposal systems. Implement the prevention and correction plan.	Milestones of Year 1
						New or Revised
Year 1	Year 1		Year 1	4-5-2014		Start Date
Reviewed performance of existing adopted portions of iSWM for its applicability to the City. No changes were necessary for Year 1. Complete	pickup. On-going.	a week and transported to a matching recovery facility. On-going.	Day on 4-5-2014. 99,000 loss of household waste were collected. Complete. Recyclable materials are collected once	Held the Rockwall Hazardous Waste	Complete	Status / Completion Date (completed, in progress, not started)

MCM(s)	BMP	Milestones of Year 1	New or Revised	Start Date	Status / Completion Date (completed, in progress, not started)
3. Construction	3.2. Implement	The Engineering Department conducts pre-construction		Year 1	The Engineering Department conducts pre-construction meetings for
Site Storm Water Runoff	Standards	meetings for proposed new construction projects to			provide design compliance guidelines
Control		provide design compliance			to contractors. Un going
		guidelines to contractors.			
	3.2. Implement	The Engineering Department		Year 1	Inspections are conducted on
	Design and Control	conducts inspections and			complaints at constructor's BMP and
	Standards	follow- up on complaints on			O&M practices as needed. On going
		provide recommendations on			
		modifications/improvement of			
		contractor's BIVIP's and Oalvi			
		practices.		Year 1	Have incorporated waste management
	3.3 Implement	conducts pre-construction			discussions (and verbiage in pre-con
	Imposed by Code	meetings for proposed new			meetings. Pre-construction meetings
	of Ordinance	COnstruction projector to			required for all development and on
		for contractors for management			projects. On-going.
		of waste.			Isoppotions are conducted on
	3.3 Implement	The Engineering Department		Year	complaints at construction sites, with
	Requirements	conducts inspections and			modifications of contractor's BMP and
	of Ordinance	construction sites. We also			O&M practices as needed. On going
		provide recommendations on			
		modifications/improvement of			
		contractor's BMPs and Owivi			
		practices.			

MCM(s)	BMP	Milestones of Year 1	New or Revised	Start Date	Status / Completion Date (completed, in progress, not started)
3. Construction Site Storm Water Runoff Control	3.4 Illicit Discharge/Dumping Response Plan	Direct the public to report any illegal dumping or illicit discharge.		Year 1	Implementation of the Discharge Dumping Response Plan was started. Provided a 24 hour phone number and illicit discharge reporting options on the City Website. Complete
	3.5 Construction Plan Review	Implement procedure to track the receipt of SWPPPs, NOI, and City Erosion Policies prior to the release of construction		Year 1	Use TrakIT software to track the submittal of SWPPPs, NOI, and City Erosion Policies. Complete
	3.6 Construction/ Post-Construction Handout	Erosion control requirements are in the City's "Construction Notes" that is distributed at our pre-construction meetings.		Year 1	Construction notes were reviewed and no revisions needed. Construction notes are distributed to contractors in pre-con meetings and a "Construction Notes" link is also provided on the City website.
	3.7 Municipal Employee Training	Send Engineering Department personnel to NCTCOG Storm Water Prevention Course.		Year 1	Sent two in Year 1. One inspector received a Certificate for Storm Water Inspections. See attachments for certificates. Complete
	3.7 Municipal Employee Training	Develop an outline of the information to be communicated for a 5 yr period		Year 1	In progress
4. Post Construction Storm Water Management in	4.1 NCTCOG iSWM Design Manual	Staff adopted sections of the iSWM Manual for use by the City with site development activities.		Year 1	adopted performance of concerns adopted portions of iSWM for its applicability to the City. No changes were necessary for Year 1. Complete
New Development and Redevelopment					

MCM(s)	4. Post Construction Storm Water Management in New Development and Redevelopment				
BMP	4.2 Final Inspection	4.2 Final Inspection	4.2 Final Inspection	4.3 Illicit Discharge/Dumping Response Plan	4.4 Construction/ Post-Construction Handout
Milestones of Year 1	City conducts field inspection for completed construction sites to verify compliance to plans and specifications, including site stabilization.	The City issues "Letters of Completion" for those sites that comply with plans and specifications (including site stabilization).	The City will follow up with the contractors about complaints and observations in the field to insure long term O&M.	Direct the public to report any illegal dumping or illicit discharge.	Erosion control requirements are in the City's "Construction Notes" that is distributed at our pre-construction meetings.
New or Revised					
Start Date	Year 1	Year 1	Year 1	Year 1	Year 1
Status / Completion Date (completed, in progress, not started)	The inspection is required prior to acceptance of the completed construction project. On-going.	The letter is issued as part of acceptance of the construction for the project. On-going.	Inspectors respond to complaints regarding erosion issues that are due to storm water management items that are not performing properly or not properly maintained. On-going.	Implementation of the Discharge Dumping Response Plan was started. Provided a 24 hour phone number and illicit discharge reporting options on the City Website. Complete	Construction notes are distributed to contractors in pre-con meetings and a "Construction Notes" link is also provided on the City website. On going

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MCM(s)	5. Pollution Prevention/Good Housekeeping for Municipal Operations					
BMP	5.1 City Owned Facilities and Control Inventory	5.2 Municipal Employee Training	5.2 Municipal Employee Training	5.3 Contractor Oversight	5.4 Pollution Prevention Plan and O&M (Operation and Maintenance)	5.5 Storm Water System Maintenance Plan
Milestones of Year 1	Develop an inventory of City owned and operated facilities	Use training material developed by NCTCOG for training	Training received by City employees	Develop a list of contractors the City uses through all departments	Identify municipal operations that may require a storm water pollution prevention plan	Develop an inspection process to identify sensitive areas for waste accumulation
New or Revised						
Start Date	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1
Status / Completion Date (completed, in progress, not started)	On going	Current training materials reviewed and determined no modifications in Year 1	52 employees watched Storm Water Pollution Prevention DVD 9-18-2013	On going	Ch going	On going

									MCM(s)
1.10 Provide public means to report	1.9 Inlet Markers program developed	1.8 Training received by employees	1.7 Have one presentation to the City Council at a public meeting on the SWPPP each year.	1.6 Utilize NCTCOG tracking	1.5. Review and Distribute Construction Notes at Pre- Construction Meeting	1.3. Conduct 2 outreach campaigns	1.2. Conduct 2 outreach campaigns	1.1 Provided public notice	Measurable Goal(s)
Met Goal	Met Goal	2-Engineering Stormwater Prevention 1-Certified Stormwater Inspector 52-Stormwater Pollution Prevention	Presented Storm Water Management Program to Council via memo in Council packets.	Met Goal.	Met Goal.	Met Goal.	Met Goal.	Met Goal.	Success
None	None	None	None	None	None	None	None	None	Proposed Changes (submit NOC as needed)

# TABLE 2 – Measurable Goals Status

recove	2.9 Re (newsp clear p collect transp	2.9 Scl Hazarc collecti hazard	2.8 Re	2.7 Direct discharge	2.6 Pos Manage website	2.5 Reviev removing	2.4 Revie Ordinanc	2.2 Trainin employees	2. 2.1 Upd Map	MCM(s) Me
recovery facility.	2.9 Recycling materials (newspaper, magazines and clear plastic bottles) are collected weekly and transported to a material	2.9 Schedule and conduct the Hazardous Waste Day for collection of household hazardous waste once a year.	2.8 Review procedures	2.7 Direct the public to report discharge	2.6 Post Storm Water Management Program on website	2.5 Review detecting and removing illicit discharge ordinance	2.4 Review Illicit Discharge Ordinance for needed revisions	2.2 Training received by employees	2.1 Updated Storm Sewer Map	Measurable Goal(s)
	Met Goal.	Met Goal.	No revisions. Met Goal	Provided 24 hr number and website reporting. Met Goal	Met Goal	Met Goal.	Met Goal.	2-Engineering Stormwater Prevention 1-Certified Stormwater Inspector 52-Stormwater Pollution Prevention	Met Goal.	Success
	None	None	None	None	None	None	None	None	None	Proposed Changes (submit NOC as needed)

T										
	4.							ω	ĸ	MCM(s)
4.2 Conduct field inspection for completed construction sites.	4.1 Review the iSWM Manual for the conformance with site development activities.	3.7 Municipal Employee Training	3.6 Construction Notes distributed during pre-con	3.5 Construction Plan Review	3.4 Implementation of the Illicit Discharge Dumping	3.3 Implement Requirements Imposed by Ordinance	3.2 Implement Design and Control Standards	3.1 Review the iSWM Manual for the conformance with site development activities.	2.9 Provide a monthly curb- side pickup for bulk items, such as tree limbs and leaves. Grass clippings will be picked up with regular trash, twice a week.	Measurable Goal(s)
Met Goal.	Met Goal.	2-Engineering Stormwater Prevention 1-Certified Stormwater Inspector 52-Stormwater Pollution Prevention	Met Goal.	Track by means of software. Met Goal	Met Goal.	Met Goal.	Met Goal.	Met Goal.	Met Goal.	Success
None	None	None	None	None	None	None	None	None	None	Proposed Changes (submit NOC as needed)

Ņ				.4	MCM(s)
5.2 Municipal Employee Training	4.4 Distribute Construction Notes at pre-con meeting	4.3 Direct the public to report discharge	4.2 Follow up with the contractors about complaints and observations in the field to insure long term O&M.	4.2 Issue "Letter of Completion" for those sites that comply with plans and specifications.	Measurable Goal(s)
2-Engineering Stormwater Prevention 1-Certified Stormwater Inspector 52-Stormwater Pollution Prevention	Met Goal	Provided 24 hr number and website reporting. Met Goal	Met Goal.	Met Goal.	Success
None		None	None	None	(submit NOC as needed)

# A. Certification

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

Signature: Name: Timothy M. Tumulty, PE Date: Title: Director of Public Works/City Engineer 01/23/2015

# A. Certification

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

Signature:	Name:Tim Tumulty, PE
Date:	

# APPENDIX

Materials Distributed at Events and Website





## Landscape Irrigation

ne of the most important steps in maintaining a healthy landscape is effective irrigation. A properly watered lawn

and garden is more resistant to pests and other lawn problems. However, much of the water used to maintain our landscapes is wasted through inefficient watering techniques. By developing a water-efficient lawn and garden, you can maintain a healthy and beautiful yard that benefits the environment.

#### Water-Efficient Landscapes

A water-efficient landscape starts with plant selection. Choosing plants adapted to the area will help make your landscape both beautiful and water-efficient. Plants native to your area typically require less maintenance and smaller amounts of pesticides, fertilizers, and supplemental water.

Keep in mind, though, that newly established landscaping will require

more water than an established area. Adjust your watering schedule according to the needs of your plants.\*

#### Watering Mistakes

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

- Runoff. Applying water too rapidly causes runoff, because grass and plants can only absorb so much water at a time. When runoff occurs, soil, fertilizers, and pesticides can be carried to nearby streams.
- Evaporation. Watering in the middle of the day or using a sprinkler that sprays a fine mist causes much of the water you apply to be lost through evaporation. Plants don't have enough time to absorb the water before it is evaporated by the sun.
- Underwatering. Watering too little is wasteful because it does

little to alleviate any drought stress that the plants may have.

Overwatering. Applying too much or too often causes the greatest waste of water. In addition to overwatering the plant, excessive irrigation can leach nutrients deep into the soil away from plant roots, which increases the chances of runoff pollution.

#### Good Watering Techniques

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

To water properly, apply 1 inch of water to the lawn as rapidly as possible without runoff.

- An easy way to measure your application of water is to place a 6-ounce tuna can on your lawn. When the can is full, you have applied enough water.
- If you start to notice runoff before the can is full, turn off the water. Then, wait for approximately one hour to allow the grass to absorb the water, turn the water on again, and wait for the tuna can to fill.

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

\*Always comply with your water system's water-use restrictions



## Rainwater Harvesting with Rain Barrels

#### What Is Rainwater Harvesting?

Rainwater harvesting is the collecting and storing of rainwater. You can collect rainwater from a roof, which is the most common method, and store it in catchment tanks, such as rain barrels.

#### A Brief History of

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

However, as the environmental and economic costs of providing centralized water escalate, a new interest



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

#### Reasons for Harvesting Rainwater

#### Benefits

- The water is free.
- Rainwater is better for plants than chemically treated water.

- Rainwater harvesting can help reduce flow to storm water drains and reduce stream pollution.
- Using stored rainwater can reduce utility bills.

#### Other Incentives

Texas Tax Code 151.355 exempts rainwater-harvesting equipment from sales tax. To download the Texas Sales and Use Tax Exemption Certificate, visit <www.window.state.tx.us/taxinfo/ taxforms/01-339.pdf>.

#### HOW TO CONSTRUCT A RAIN BARREL

#### Materials

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

#### Instituctions

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

Connect the hose to the pipe coupling overflow spigot at the top of the barrel. You can run this hose into another barrel or to a soaker hose (which will evenly distribute excess water and help avoid flooding).

4. Downspout. Place the barrel directly below the downspout. You will need to reconfigure the downspout to flow into the hole. If you like, place the barrel on concrete blocks or bricks. Raising the barrel will allow you to get a bucket under the spigot, and will facilitate leveling the area where your barrel will sit.

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

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

lexas.ord

#### XAS" TAKE CARE OF E GUIDE

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

#### Quick Tips to Avoid Pests

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

Always comply with your water system's water-use restrictions,

#### 1. Aphids

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

#### Infestation and Attack

Aphids attack new growth or the underside of leaves. They suck sap from plants and excrete clear, sticky "honeydew" onto leaves. This honeydew often causes a black, sooty fungus that blocks sunlight from leaves. Typically, aphids attack bedding plants, crape myrtle, hibiscus, oaks, oleanders, pecan trees, roses, and vegetables.

#### Prevention or Solutions

- After you identify an infestation, introduce ladybugs, lacewings, and other beneficial insects to your landscape. For best results, follow release instructions carefully and release in an enclosed area.
- Use sticky barriers to prevent ants from tending the aphids and protecting them from natural predators.
- For minor infestations, spray host plants with water at high pressure to dislodge the aphids.
- Use insecticidal soaps and horticultural oils to help control the aphids.

 When appropriate, use row covers, which will physically keep the aphids off vegetable crops while still allowing air, light, and water exchange.

#### 2. Caterpillars

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

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

#### Infestation and Atlack

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

#### Prevention or Solutions

Caterpillar

- Do not treat native trees; caterpillar infestations are natural and rarely threaten the health of a tree unless it is already stressed or weakened.
- Monitor infestations of very young caterpillars to see if natural controls such as predators, parasitic wasps, or harsh weather will eliminate the infestation. Try releasing parasitic wasps when caterpillars first appear.



Hornworm

Aphid

Spring Cankerworm



## Managing Lawn Problems in Texas

#### Choose Your Landscape

When choosing a landscape for your yard, it is important to consider not only what you want your yard to look like, but the amount of resources and time necessary to maintain it. Lawn alternatives, such as drought tolerant native plants, can save water and energy as well as time and money by requiring little maintenance. For more information on selecting a landscape, visit <earthkind. tamu.edu>.

If you decide to have a lawn, consider planting a less extensive grass landscape and choose a turf that is right for your region and environment.

#### Choose Your Turf

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

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

Choosing the right type of turfgrass is an important first step in maintaining a healthy lawn. The most commonly used grasses in Texas are St. Augustine, Bermuda, buffalo, centipede, tall fescue, and zoysia, which are generally compatible with the state's diverse climate conditions. When choosing what type of grass to use, keep in mind its tolerance to shade, drought, traffic, cold, salinity, and disease. Properly adapted turfgrass will require less maintenance and smaller amounts of fertilizer and supplemental water.

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

#### Maintain Your Lawn

Maintaining a healthy turf will help you avoid many common lawn problems, as well as the need for many pesticides including insecticides, herbicides, and fungicides. The following tips will help you keep your lawn healthy and beautiful:

- Choose the correct turf for your light conditions and lawn use.
- Establish an adequate depth of healthy soil (at least 6 inches under your turf).
- Aerate your lawn once a year to improve drainage and reduce soil compaction.
- Irrigate efficiently, making sure to:
  - » water in the morning, before 10 a.m.,\*
  - » wet the soil to a depth of 4–6 inches, and
  - » allow the soil to dry out between watering.
- Mow properly, taking no more than one-third of the grass blade off with each mowing.
- Be careful not to overfertilize, which can weaken turf, as well as contribute to water pollution by causing excess nutrients to be released into rainfall runoff. Choose natural or organic fertilizers, such as compost, which typically slowrelease their nutrients and can often be used in smaller amounts.
- Test your soil periodically to determine which nutrients re lacking, before you decide whether or not to fertilize.

\*Always comply with your water system's water-use restrictions





### Mulching and Composting A "TAKE CARE OF TEXAS" GUIDE

#### Why Mulch and Compost?

#### To Save Money

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

#### To Save Time and Effort

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

#### To Help Your Community

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



#### Mulch

#### What Is Mulch?

Mulch is a material that is used to protect the soil and to inhibit weed growth by covering the ground. Good mulches include wood chips, leaves, grass clippings, and compost. They can benefit your lawn and garden by preventing erosion, suppressing weeds, retaining soil moisture, moderating soil temperature, and adding nutrients as they break down slowly.

#### How to Use Mulch

- Put a 3- to 4-inch layer of mulch around your trees, shrubs, and garden plants. To prevent diseases and pest infestation, mulch should not be piled up against the stems or trunks of plants. For best results, use long-lasting mulches (wood chips, wood shavings, evergreen needles).
- Create a self-mulching lawn! Wait to mow until your grass is between 2 and 4 inches high. Then mow off only the top one-third of the grass, and don't bag the clippings. This way, the clippings will feed your soil and won't smother your grass.
- If you have too many clippings, rake them into mulch layers around trees and shrubbery.

#### Mulching Basics

- Mulch all areas that are not covered in grass or thick ground cover.
- Use a layer of coarse mulch 3 inches or more in depth for weed control.
- When converting grassy areas to mulch, smother the grass with a thick layer of cardboard or newspaper rather than killing it with chemicals.
   Some hardy grasses must be rooted out for successful removal.

- Blanket perennials with several inches of shredded leaves or whole pine needles to protect them from the winter cold.
- Spread mulches under annuals after they are well established.
- Water the ground thoroughly before and after applying a mulch cover.
- Never rely on a rainstorm to water your mulches. In many cases, the rain will fall too heavily and quickly, and a fair amount of your mulch may run off into the storm drain and local creeks.

#### Compost

#### What Is Compost?

Compost forms when you mix together things like leaves, grass clippings, vegetable and fruit scraps, coffee grounds and filters, and used tea bags. The mixture eventually breaks down and forms humus, which you can use to enrich your soil. Compost has many of the nutrients that plants need. You can use it as a mulch or topdressing or can mix it into the soil.

#### How to Use Compost

- To plant a lawn or garden, mix 1 to 2 inches of compost into the top 6 inches of soil.
- To maintain a lawn or garden, sprinkle it with a 1/4- to 1/2-inch layer of sifted compost once a year and water the compost.
- To control erosion in a lawn, cover bare areas with 2 to 4 inches of compost.
- To add nutrients and control fungus in gardens or planters, use compost as one-third of a potting soil mix (with equal parts topsoil and sand).

Take Care or **Texas** TakeCareOfTexas.org

## The "Take Care of Texas" Guide to Yard Care

o your part for the environment, starting in your own yard. The *"Take Care of Texas" Guide to Yard Care* will help you maintain a healthy yard, save money, and take care of our state's

#### Why Take Care of Texas?

varied landscapes.

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

#### Water Conservation

Lawn and garden watering make up nearly 40 percent of total household

water use during the summer. Finding ways to use less water will not only help conserve this precious resource, it will also save you money on your water bill.\*

#### Irrigate Efficiently

Much of the water applied to lawns and gardens is never absorbed by plants. The greatest waste of water results from applying it too rapidly or too often. Water applied too rapidly is lost as runoff, which may carry polluting fertilizers and pesticides to streams and lakes. Some water evaporates when it's applied to bare, unmulched soil, or in the hot afternoon.

Sprinkler systems offer an effective method for irrigation, if used properly. Make sure that sprinkler heads are adjusted to avoid watering sidewalks and driveways. Also, a properly adjusted sprinkler head sprays large drops of water instead of a fine mist, which is more susceptible to evaporation and wind drift.



Drip irrigation and soaker hoses offer an efficient method for watering vegetables, ornamental and fruit trees, shrubs, vines, and container-grown plants. Drip irrigation slowly applies water to the soil by flowing, under low pressure, through emitters, bubblers, or spray heads placed at each plant. Water applied by drip irrigation is not likely to evaporate or run off.

Soaker hoses require less equipment and are easier and less expensive to install than drip irrigation. A soaker hose is a porous hose that can be connected to an outside faucet, a garden hose, or a rain barrel and laid out along the base of the plants. The hose allows water to seep out along its length.

For more information on irrigation practices, see *Landscape Irrigation: A "Take Care of Texas" Guide* (GI-409) at <www.tceq.texas.gov/publications/gi/ gi-409.html>.

#### Avoid Overwatering

Watering too heavily or too often weakens your lawn and causes erosion and runoff pollution. Excess irrigation can also leach nutrients deep into the soil away from the plant roots, increasing the chances of polluting the groundwater. Similarly, runoff caused by excess irrigation can carry polluting fertilizers and pesticides to streams and lakes.

Most lawns receive twice as much water as they require for a healthy appearance. Water should be applied to lawns infrequently, yet thoroughly. To know when it's time to water your lawn, simply observe your grass. Wilting and discoloration are signs of water stress. At the first sign of wilting, you have 24 to 48 hours before damage to your lawn occurs. A general rule is to

Always comply with your water system's water-use restriction.

G-28 (Rev 7/13)



## dquemos ( ster Coet

• Evitar acumulaciones de grasa que obstroyae las líneas de drenaje. • Detener los desbordamientos de drenaje hacia la calles y desagües pluviales. 🥑

#### qué tengo que ayudar?

- Ahorrar dinero gastado en limpiezas costosas de derra cones de aguas residuales. • Reducir el número de veces que se tlenen que limplar Las trampas de grasa (servicio de alimentos).
- Proteger la calidad de nuestra agua.

#### **HAGA ESTO!**



Ponga el aceile y la grasa en contenedores cerrados para colección.

> Quite las sobras de comida en boles o bolsas de basura y disponga de ellos adecuadamente. Evite usar su trituradora de basura.



Quítele el aceite y la grasa a los trastes, ollas, freidoras y parrillas. Primero enfrie antes de tallar o limpiar el exceso de grasa.



Enjuague los trastes y ollas con agua fría antes de ponerlos en la lavadora para trastes.

Cubra el fregadero de la cocina con una canasta para capturar comida y vacício en el bole para basura, como sea necesario.

> Cubra el resumidero en el piso con un cedazo fino y vacíelo en el bote de la basura, como sea necesario.

#### **ind haga esto!**



No tire sobras de comida 📢 por el desagüe. 🧳



No enjuague los trastes, ollas, freidoras y parrillas con agua para tirar el aceite y la grasa por el desagüe.

No enjuague el aceite y grasa con agua caliente.



#### Dtras Maneras de Atacar la Gras

- 🍉 Use productos de límpieza ambientalmente seguros en lugar de detergentes o limpiadores ásperos que pueden dañar las líneas de drenaje.
- 🕨 Si genera en la cocina grandes canlidades de aceite usado, reúselo o recíclelo. Para encontrar a un reciclador, revise el directorio telefónico bajo "recicladores."
- Si usted genera cantidades pequeñas de aceite usado para cocinar, reuse tan seguido como sea posible y luego vacíelo en un contenedor que pueda tirar. Nunca vacíelo por el desaglie.
- Empiece un monión de abono en su casa con sobras de alimentos que no contengan carne. Aprenda sobre el compostaje en la publicación de la TCEO, Una Guía Verde para el Cuidado del Jardín (GI-028).





NCTCOG Public Education Activity Report

NCTCOG Public Education Activity Report





North Central Texas Council of Governments



#### Public Education Activity Report August 13, 2013, to December 31, 2014

The purpose of this activity report is to document the public education-related initiatives conducted by the Stormwater Public Education Task Force (PETF) under the direction of the Regional Stormwater Management Coordinating Council (RSWMCC) that took place from August 13, 2013, to December 31, 2014. The PETF's mission is to promote Municipal Stormwater Public Education in North Central Texas through the exchange of professional experience and to explore, develop, and implement opportunities for mutual cooperation. Participation in the PETF and education campaigns is a volunteer effort to help meet stormwater public educational requirements.

During this reporting period, the PETF focused primarily on five educational campaigns to address lawn and garden care, general stormwater issues, and the proper management of pet waste, fallen tree leaves/yard waste, and fats, oils, and grease (FOG). Other cooperative efforts were also conducted during the August 13, 2013, to December 31, 2014, time period (identified in the "Other" section). See the sections below for specifics.

#### Lawn and Garden Care

The purpose of the lawn and garden care campaign, known as "March Is Texas SmartScape® Month," is to encourage the public (specifically homeowners and/or landscape companies) to use native and adapted plants in the landscape and adopt proper design, care, and maintenance techniques. Texas SmartScape plants need less water, pesticides, and fertilizers to thrive, thus reducing these pollutants from landscape runoff.

"March Is Texas SmartScape Month" has been identified as a Regionally Developed Initiative (RDI) and provides local governments with the opportunity to join others in a common goal to educate citizens on stormwater pollution prevention. The campaign was primarily promoted during the month of March; however, activities occurring outside this month falling in the August 13, 2013, to December 31, 2014, time period are included.

#### 1. Bookmarks

The Texas SmartScape bookmarks were developed in 2003. The bookmarks were updated in 2013 with new photographs and a new layout. Each bookmark has a photo of a SmartScape plant on the front with the Texas SmartScape website address. On the back of the bookmarks, there is a description about the environmental benefits of Texas SmartScape plants.

A total of 10,650 bookmarks were cooperatively purchased in April 2014 for the purpose of distributing by the following 15 organizations: City of Azle, City of Bedford, City of Burleson, City of Dallas, City of Duncanville, City of Frisco, City of Fort Worth, City of Garland, City of Grapevine, Town of Highland Park, City of Hurst, City of Mansfield, City of McKinney, City of North Richland Hills, and City of Rockwall.

#### 2. Website

The Texas SmartScape website (<u>www.txsmartscape.com</u>) was developed for the North Central Texas region in 2003 and for the West Texas region in 2005 through the sponsorship of several organizations. It is an interactive how-to guide that teaches concepts of landscaping with native and adapted plants; it also offers proper design, care, and maintenance techniques that are

environmentally friendly. The most popular feature of this website is the plant search database, which helps the public select SmartScape plants that are appropriate for their yards/projects.

The website was completely updated in 2013 to include a new layout and photographs. The information remains the same, but the website is now more user-friendly and has a more modern feel.

Table 1: User statistics f				Avg. Session
Month	Users	Sessions	Page Views	Duration
August 13-31, 2013	2,920	3,705	20,561	4:08
September 2013	5,033	6,404	35,557	4:08
October 2013	4,110	5,229	30,914	4:32
November 2013	3,279	5,600	64,553	9:45
December 2013	1,702	2,085	12,854	4:28
January 2014	2,897	3,620	26,884	4:57
February 2014	4,875	6,204	50,606	5:16
February 2014	11,557	15,064	125,456	5:40
March 2014	13,984	18,208	132,879	4:55
April 2014	12,564	16,211	107,089	4:29
May 2014	8,974	11,116	60,209	3:51
June 2014	7,646	9,378	45,226	3:33
July 2014	7,000	8,710	40,378	3:33
August 2014	7,000	8,625	41,438	3:31
September 2014	6,675	8,249	39,675	3:33
October 2014		4,878		3:26
November 2014	4,043	3,770	15,801	3:19
December 2014	3,186	137,056		Avg: 4:33
Total	100,507	137,050	011,794	1.00

Table 1: User statistics for the Texas SmartScape website (www.txsmartscape.com) by month.

Table 2: User statistics for the Texas SmartScape website (<u>www.txsmartscape.com</u>) based on location (only stormwater program participants and/or organizations located in the North Central Texas region are listed).

Texas region are listed	Sessions	Pages per Session	Avg. Session Duration	New Sessions (%)	Bounce Rate (%)
Organization	124	6	3:51	68	48
Addison		8	4:58	74	48
Aledo	121		5:38	72	42
Allen	1,366	8			43
Alvarado	23	5	5:15	83	
Anna	134	5	5:07	54	58
Argyle	137	13	6:49	72	42
Arlington	4,704	8	5:47	63	41
Athens	43	7	4:29	77	40
	12	4	2:39	.92	42
Aubrey	237	7	4:44	77	48
Azle	665	8	5:38	66	39
Bedford	18		1:39	89	67
Blue Ridge Bonham	41	4	5:27	78	41

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Question	Sessions	Pages per Session	Avg. Session Duration	New Sessions (%)	Bounce Rate (%)
Organization	19	6	4:53	89	42
Bowie	41	10	9:10	78	41
Bridgeport	1	10	0	100	100
Brownsboro	707	8	5:33	57	45
Burleson	34	3	2:08	82	56
Caddo Mills	3	3	1:20	100	67
Campbell	36	15	10:55	89	25
Canton	1,619	8	5:21	69	41
Carrollton	198	6	3:46	66	45
Cedar Hill	7	14	8:26	29	43
Celeste	36	7	4:58	83	53
Celina	14	2	0:13	100	93
Chandler	232	8	6:00	60	34
Cleburne	7	2	0:56	71	43
Clifton	194	4	3:30		66
Colleyville	194		5:41	58	33
Comanche			1:01		90
Commerce	175				50
Cooper					40
Coppell	843				42
Corsicana	48				50
Crandall	16				45
Crowley	160				100
Cumby	1				45
Dallas	12,087				44
De Leon	2!				
Decatur	14				42
Denton	1,64				
DeSoto	18		7 4:5 7 4:5		_
Duncanville	17			terre and the second	
Emory		9 1			
Ennis			3 7:5		
Euless	37		6 4:5		
Fairfield			0 3:4		
Farmersville		4	3 2:0		
Ferris		5	5 3:		
Flower Mound	1,49		6 4:		
Forney		68	8 6:		
Fort Worth	11,8			56 60	
Frisco	3,0	08	7 5:	12 62	2 47

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	Sessions	Pages per Session	Avg. Session Duration	New Sessions (%)	Bounce Rate (%)
Organization		13	7:56	63	48
Gainesville	226	9	6:42	66	40
Garland	2,464	6	3:47	73	56
Glen Rose	52	8	5:23	73	45
Granbury	392	8	5:33	74	43
Grand Prairie	605	6	5:42	58	40
Grapevine	2,159	9	5:32	62	44
Greenville	133	9	6:12	74	29
Haltom City	106		0:12	100	78
Hamilton	9	2	19:30	100	33
Hico	3	14	3:29	88	71
Hillsboro	17	5			60
Honey Grove	5	4	1:30		100
Hubbard	1	1	0		38
Hurst	379	9	7:45		67
Hutchins	3			-	45
Irving	1,637				80
Italy	5				17
Itasca	6		the second s		61
Jacksboro	23				56
Joshua	9				
Justin	137				
Kaufman	16		3 4:0		
Keene	16		3 3:0		50
Keller	1,002		7 5:1		
Kemp		2 1			
Kennedale	24	·	5 3:1		
Krum	1	1 1	0 12:4		
Lake Dallas	3	0	9 6:5		
Lancaster	2	6	3 1:4		
Leonard	1	2		11 92	
Lewisville	1,17	'9		36 63	
Lipan	2	22		44 73	
Little Elm	41	10		05 74	
Lone Oak		8		40 8	
Mabank		27		20 8	
Mansfield	94	43	8 5	.47 6	
Maypearl		5	9 6	:10 10	
McKinney	2,6	00	7 4	:32 6	6 4
Melissa		28	12 5	:02 9	6 3

December 2014

	Sessions	Pages per Session	Avg. Session Duration	Nev Sessi (%	ons	Bounce Rate (%)
Organization		9	5:21		71	48
Mesquite	537	6	4:14		61	44
Midlothian	313	4	3:05		29	71
Milford	14		5:34		66	49
Mineral Wells	88	8	0:36		100	0
Montague	1	2	3:00		86	69
Muenster	29		7:27		52	56
Nevada	25	16	5:29		85	46
Newark	13	6	5:48		62	40
North Richland Hills	1,356	8	3:5		88	42
Palestine	33	5			100	33
Palmer	6	3	4:0		100	100
Palo Pinto	2	1		0	76	57
Paris	86	5	3:3			100
Parker County	1	1		0	100	54
Pilot Point	102				70	44
Plano	6,146		and the second		66	
Ponder	15				87	33
Princeton	13		-		46	15
Prosper	450				71	45
Quinlan	23				87	52
Red Oak	104	4		29	73	43
Richardson	2,23	5 8		16	70	44
Roanoke	180	6		22	69	55
Rockwall	61:	2		25	65	44
Rowlett	52	8		:40	63	42
Royse City	6	4 1		:01	69	3
Sachse	1	6		:30	88	4
Scurry		1		:26	100	
Seagoville	2	2	4 6	:40	86	
Southlake	83	33	8 5	5:07	69	
Springtown	12	25	7 5	5:38	62	
Stephenville	18	30	6 3	3:29	72	
Sulphur Springs		41	7 !	5:05	98	
Sunnyvale		14	3	1:05	79	
Terrell		66	9	8:43	70	
		31	9	4:58	62	: 3
The Colony		15	8	4:19	73	3 3
Trenton		43	9	9:57	58	3 2
Valley View Waxahachie		54	8	5:32	70	)

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Organization	Sessions	Pages per Session	Avg. Session Duration	New Sessions (%)	Bounce Rate (%)
Weatherford	518	6	4:23	65	48
Weston	1	1	0	0	100
Whitney	127	6	4:08	76	50
Wills Point	6	3	2:07	100	50
Wolfe City	2	5	2:29	100	0
Wylie	744	6	4:27	72	49

### 3. Planning Tools

A number of planning tools were made available to help local governments and other organizations promote Texas SmartScape in their communities. The theme for the 13th Annual March Is Texas SmartScape Month, "Give Water the Boot, Plant Texas SmartScape Roots!", was chosen by PETF participants. Materials prepared to align with this theme included a press release template and graphics for public service announcements (used in water bill inserts, flyers, and other marketing materials).

Materials that were prepared for past Texas SmartScape Months continued to be made available and included public service announcements for radio, sample resolution/proclamation (to assist in officially designating March as Texas SmartScape Month), brochures and posters, press release templates, and public service announcements for print. The materials listed above were made available through the web (<u>www.nctcog.org/envir/SEEclean/txsmartscape/index.asp</u>) for local governments to customize and distribute as desired.

4. Nursery/Landscape Company Partnership Program

NCTCOG, in cooperation with local communities, initiated a partnership effort with North Central Texas nurseries and landscape design/maintenance companies in August 2009. Nurseries that wished to partner with Texas SmartScape were encouraged to use specially designed and recognized stickers to identify these plants at the nursery as Texas SmartScape-approved. Landscape design/maintenance companies that wished to partner with Texas SmartScape were encouraged to notify NCTCOG if they use Texas SmartScape ideas and techniques in their landscape design and maintenance. NCTCOG would then post information about these companies to a page ("Texas SmartScape-friendly companies") on the Texas SmartScape website.

Information about 8 Texas SmartScape-friendly companies has been posted to the Texas SmartScape site.

5. Texas SmartScape-Related Events

The purpose of the Stormwater Education Events Calendar

(www.nctcoq.org/envir/SEEclean/stormwater/meetings/calendar/index.asp) and the Texas SmartScape Calendar (www.txsmartscape.com/events/index.asp) is to provide a common location for organizations to post information about upcoming stormwater-related events going on across the region. More than 100 Texas SmartScape-related events were posted to these calendars. The following 17 organizations hosted these events: City of Allen, City of Arlington, City of Bedford, City of Coppell, Dallas Water Utilities, City of Denton, City of Fort Worth, City of Frisco, City of Grand Prairie, City of Irving, City of Lewisville, City of Mansfield, City of McKinney, City of Plano, City of Richardson, City of Southlake, and Texas A&M AgriLife. This year also marked the first annual Texas SmartScape plant sales. Several cities in the region partnered with Home Depot and Weston Gardens to offer consumers special deals on select varieties of Texas SmartScape plants. Consumers were given the opportunity to talk with master gardeners, plant experts, and irrigation specialists. Ten plant fairs were hosted in spring 2014 by the following 9 cities: Arlington, Carrollton, Frisco, Fort Worth (2), Irving, Mansfield, Mesquite, Plano, and Southlake.

### 6. Texas SmartScape Plant List Update

The Texas SmartScape plant list was created in 2001. As environments, plants, and plant availability change over time, the PETF decided it was time to update the current Texas SmartScape plant list. The update was kicked off by NCTCOG staff in July 2014 with a team of plant experts from Berry Nurseries (a Home Depot grower), the City of Plano, Tarrant Regional Water District, Texas A&M AgriLife, Texas Trees Foundation, Tree Town USA (a Home Depot grower), and Weston Gardens, with preliminary assistance from the City of Fort Worth. The project is still in progress.

### 7. DART Message Boards

Public service announcements (PSAs) with Texas SmartScape images and water conservation messaging were placed on the Dallas Area Rapid Transit (DART) bus message boards during 2014. The PSAs were placed on a few buses starting in March 2014; by June, 479 buses were broadcasting the messages. (This PSA was terminated in November 2014.)

### Pet Waste

The purpose of the pet waste management campaign, known as "DOO the Right Thing!", is to educate dog owners about the importance of picking up dog waste and disposing of it properly, and to help persuade dog owners to adopt these practices. The campaign was primarily promoted during the months of April, May, June, and July; however, activities occurring outside these months falling in the August 13, 2013, to December 31, 2014, time period are included.

### 1. Bookmarks

The dog waste bookmarks were developed in 2006 and updated in 2012. Each bookmark has a photo of a dog on the front with the slogan "For the love of your pet, please DOO the right thing!" On the back of the bookmarks, there is a description about how pet waste left on the ground can be carried away by stormwater runoff, and that pet waste can contain bacteria and parasites that can harm humans and other pets. The bookmarks also offer tips for dealing with pet waste.

A total of 9,060 bookmarks were cooperatively purchased in April 2014 for the purpose of distribution by the following 11 cities: Azle, Bedford, Burleson, Carrollton, Dallas, Duncanville, Fort Worth, Frisco, Mansfield, North Richland Hills, and Rockwall.

### 2. Dog-Waste-Bag Dispensers

A total of 7,000 dog-waste-bag dispensers were cooperatively purchased in April 2014 for the purpose of distributing by the following 9 cities: Azle, Bedford, Burleson, Dallas, Fort Worth, Garland, Mansfield, Richardson, and Wylie. Those organizations that participated in this order customized their artwork to include their logo and/or website. The bag dispensers are intended to be attached to the dog's leash so that owners always have a supply of bags to pick up after their dog(s) while on a walk.

### 3. Web Page

A web page (<u>www.dfwstormwater.com/petwaste</u>) was created in 2006 to provide additional information to dog owners about the importance of picking up their dog's waste and disposing of it properly. The health risks and water quality issues associated with leaving dog waste on the ground is discussed on this web page. Tips for dealing with dog waste and sources for additional information are also provided. Updates to the web page were made in July 2013.

Month	Users	Page Views	Average Time on Page
August 13-31, 2013	125	136	3:45
September 2013	171	211	2:14
October 2013	35	43	1:58
November 2013	26	35	2:14
December 2013	16	18	0:46
January 2014	42	48	3:07
February 2014	45	60	5:07
March 2014	39	44	1:43
April 2014	41	44	4:01
May 2014	94	126	3:35
June 2014	76	103	3:11
July 2014	54	60	3:28
August 2014	95	114	4:29
September 2014	41	47	3:37
October 2014	31	38	1:47
November 2014	22	25	4:15
December 2014	24	30	3:16
Total	977	1,182	Avg.: 3:20

Table 3: User statistics for the pet waste web page (<u>www.dfwstormwater.com/petwaste</u>) by month.

Google Analytics captures the user's city in a report that uses statistical sampling. That report shows the following user numbers for stormwater program participants during the August 13, 2013, to December 31, 2014, time period: Allen (17), Arlington (59), Azle (33), Bedford (8), Burleson (3), Carrollton (36), Cleburne (14), Colleyville (8), Coppell (3), Dallas (72), Denton (3), Euless (31), Fort Worth (220), Frisco (45), Garland (3), Grand Prairie (3), Grapevine (8), Hurst (145), Irving (25), Lewisville (6), Mansfield (6), McKinney (11), North Richland Hills (11), Plano (72), Richardson (3), Rockwall (3), Sherman (3), Southlake (20), Trophy Club (3), University Park (3), and Wylie (14).

### 4. Online Pledges

Dog owners were encouraged to take an online pledge (posted to <u>www.dfwstormwater.com/petwaste</u>) promising to pick up after their dog(s) and dispose of the waste properly. Only pledges received during the August 13, 2013, to December 31, 2014, reporting period are recorded here. This was promoted mostly during the months of May to July 2014.

A total of 48 pledges were collected through NCTCOG's online system. The pledges came from residents from the following cities/towns: Azle (4), Bedford (11), Burleson (2), Carrollton (1), Denton (10), Fort Worth (3), Frisco (2), Grapevine (1), Irving (1), Lakeside (8), Ocala (1), Pilot Point (1), Plano (1), Prosper (1), and Shady Shores (1).

### 5. Photos/Doo the Right Thing Calendar

Dog owners who took the pledge were invited to submit a photo of their dog to be entered in the "cutest dog photo contest" on the project website (<u>www.dfwstormwater.com/petwaste</u>). Photos were accepted only during the months of May, June, and July 2014.

A total of 48 photos were collected during the reporting period via the recommendations of the website and/or by local governments or other organizations. The Task Force voted for 12 finalists and a calendar was made with the winning contestants. This was made available to stormwater program participants and the public as a digital file, posted on <u>www.dfwstorm.water.com/petwaste</u> and <u>www.nctcog.org/envir/SEEclean/storm.water/pubs/index.asp</u>. Organizations could print this file and distribute the calendar.

### 6. Planning Tools

A press release template was made available to the Task Force in May 2014 to customize and distribute as desired.

### Yard Waste

The purpose of the leaf/yard waste management campaign is to educate the public about the importance of properly disposing of fallen tree leaves and other yard waste (e.g., grass clippings) and for the public to adopt environmentally friendly practices (not to blow or sweep yard waste in the streets, sidewalks, driveways, or down the storm drain, but to instead leave it on the lawn or compost).

### 1. Brochures

Yard waste brochures were developed in September 2007 to target landscape maintenance companies and in September 2008 to target homeowners. These brochures seek to show landscape maintenance companies and homeowners how to save time and money and still have a beautiful yard. The reasons mentioned in the brochures for keeping fallen tree leaves, grass clippings, and other yard waste off the street, sidewalk, driveway, and out of the storm drain are to: do less work, save money, avoid a ticket, and be environmentally friendly. Homeowners and landscape maintenance companies are instead encouraged to leave the yard waste on the lawn or compost it. These brochures were developed in English and Spanish.

A total of 5,050 brochures, 200 targeting landscape maintenance companies (100 in English and 100 in Spanish) and 4,850 targeting homeowners (4,800 in English and 50 in Spanish) were purchased as part of the annual cooperative purchase in April 2014 by the following 4 cities: Azle, Bedford, Frisco, and Watauga.

### 2. Web Page

A web page (<u>www.dfwstormwater.com/yardwaste</u>) was created in September 2008 to provide additional information to both homeowners and landscape maintenance companies about the importance of properly disposing of fallen tree leaves and other yard waste. This web address is also included on the back of the yard waste brochures.

Month	Users	Page Views	Average Time on Page
August 13-31, 2013	3	5	0:50
September 2013	3	6	1:14
October 2013	8	8	5:58
November 2013	4	5	1:57
December 2013	2	2	0:13
January 2014	0	0	0:00
February 2014	6	7	1:12
March 2014	3	3	3:14
April 2014	7	7	1:15
May 2014	5	6	3:02
June 2014	2	2	0:32
July 2014	4	4	0:48
August 2014	7	8	2:57
September 2014	5	6	1:02
October 2014	3	4	2:39
November 2014	4	5	2:54
December 2014	6	10	2:39
Total	72	88	Avg.: 1:58

Table 4: User statistics for the yard waste web page (<u>www.dfwstormwater.com/yardwaste</u>) by month.

Google Analytics captures the user's city in a report that uses statistical sampling. That report shows the following user numbers for stormwater program participant cities for the August 13, 2013, to December 31, 2014, time period: Arlington (6), Carrollton (3), Colleyville (3), Coppell (3), Duncanville (3), Hurst (3), Fort Worth (11), and North Richland Hills (3).

3. Public Service Announcement

NCTCOG continued to make available a 30-second yard waste ("leave it on the lawn") public service announcement (PSA) developed by the City of Dallas and WFAA for interested organizations. This PSA encourages viewers to keep grass clippings out of the storm drain by sweeping them off of streets, sidewalks, and driveways and back onto the lawn. It also informs viewers that when it rains, grass clippings and other pollutants can be washed down the storm drain, eventually ending up in lakes, rivers, and creeks. Some of the issues related to water quality (e.g., leading to an overgrowth of algae) and flooding (e.g., clogging inlets and pipes) are mentioned.

4. Yard Waste Videos

Two yard waste videos, "Water Conservation and Sprinkler Maintenance" and "Yard Waste Management" were added to the website. These videos are roughly 1 minute 30 seconds in duration. The Water Conservation video provides information about how residents should water their lawn to conserve water while suggesting useful tips on sprinkler maintenance. The Yard Waste Management video educates residents on the importance of properly handling yard waste. It encourages viewers to refrain from sweeping or blowing grass clippings and leaves into the storm drain. Both videos are available in English or Spanish.

### Fats, Oils, and Grease

The PETF has an interest in educating the public about the importance of properly disposing of fats, oils, and grease (FOG) and to adopt these methods, and has partnered up with the North Texas Grease Abatement Council (NTGAC) on FOG-related educational efforts. NTGAC's mission is to educate North Texans about the effects of pouring FOG down the drain. The

NTGAC is an educational partnership between municipalities and water utilities in North Texas and is supported through a different program area.

The NTGAC continued to make several educational materials and tools available to PETF participants. The NTGAC has developed three videos that the PETF can use. The videos target apartment dwellers, restaurant staff, and residential homeowners. The NTGAC also completely updated its website in 2013 and PETF members are encouraged to refer to it. Several FOG-related items were also available for purchase in the annual cooperative purchase as described below.

1. Fat Trapper Bags

A total of 7,200 fat trapper bags were cooperatively purchased in April 2014 for the purpose of distributing by the following 8 cities: Bedford, Duncanville, Garland, Hurst, Mansfield, Plano, Richardson, and Rockwall.

2. FOG Funnels

A total of 793 FOG funnels were cooperatively purchased in April 2014 for the purpose of distributing by the following 3 cities: Hurst, McKinney, and Wylie.

3. FOG Door Hangers

A total of 1,725 FOG door hangers were cooperatively purchased in April 2014 for the purpose of distributing by the following 4 cities: Grapevine, Hurst, Mansfield, and North Richland Hills.

4. Grease Lids

A total of 3,480 grease lids were cooperatively purchased in April 2014 for the purpose of distributing by the following 6 cities: Bedford, Duncanville, Hurst, Plano, Richardson, and Rockwall.

### Educator's Toolbox

The educator's toolbox was developed by the PETF as a FY2013 project. Members of the PETF are often asked to give presentations to schools about stormwater, and this gives them options of learning activities to choose from instead of re-inventing the wheel. The Stormwater Quiz Show Game and Game Editor are available online at <a href="https://www.nctcog.org/envir/SEEclean/stormwater/program-areas/public\_education/stormwatergame.asp">www.nctcog.org/envir/SEEclean/stormwater/program-areas/public\_education/stormwatergame.asp</a>.

### Educational Videos for Children

The PETF decided to develop two educational videos, each 3-5 minutes in length, for its FY2014 project.

The first is geared toward elementary school-age kids, teaching them about stormwater runoff and informing them that only rainwater should go down the storm drain. The video also aims to make children aware that their actions, and those of their friends and parents, can affect water quality. To capture the children's attention, the video features a cartoon fish character, Freddy, as the host. This complements the "Freddy the Fish" lessons presented by some city educators. This video has been finalized and is ready to be distributed once approved by the Regional Stormwater Management Coordinating Council.

The second video is geared toward high-school students with a similar goal as the first. The main takeaway is that the sanitary sewer and storm drain systems are different, that small actions can

pollute our water bodies, and that we are all responsible for keeping our waters clean. The work on this video is still in progress.

### Other

### 1. PETF Meetings

Stormwater program participants and other interested organizations were invited to attend 4 meetings to discuss the above campaigns as well as other opportunities for regional cooperation. Each meeting concluded with a municipal roundtable in which representatives had the opportunity to discuss initiatives going on in their communities and/or ask for assistance on specific issues.

- The first meeting was held September 26, 2013. The sign-in sheet/participation record is unavailable.
- The second meeting was held December 4, 2013. This meeting was attended by 6
  people representing the following 6 organizations: City of Allen, City of Arlington, City of
  Burleson, City of Carrollton, City of Fort Worth, and City of Richardson.
- The third meeting was held February 5, 2014. This meeting was attended by 13 people representing the following 13 organizations: City of Bedford, Collin County, City of Dallas, Dallas Fort-Worth (DFW) Airport, City of Euless, City of Fort Worth, City of Garland, City of Grand Prairie, City of Irving, City of Mansfield, City of North Richland Hills, North Texas Tollway Authority, and City of Richardson.
- The fourth meeting was held May 1, 2014. This meeting was attended by 9 people representing the following 8 organizations: City of Allen, City of Burleson, Collin County, City of Dallas, City of Grapevine, Town of Highland Park, City of Irving, and City of Plano (2).
- The fifth meeting was held August 13, 2014. This meeting was attended by 18 people representing the following 16 organizations: City of Arlington, City of Bedford, City of Burleson, City of Dallas (2), City of Fort Worth, City of Frisco (2), City of Garland, City of Grand Prairie, City of Grapevine, City of Irving, City of Mansfield, North Texas Tollway Authority, City of Plano, City of Richardson, Tarrant Regional Water District, and Texas A&M Extension.
- The sixth meeting was held October 7, 2014. This meeting was attended by 16 people representing the following 14 organizations: City of Allen, City of Arlington, City of Burleson, City of Carrollton, City of Dallas, Dallas Fort-Worth (DFW) Airport, City of Fort Worth, City of Frisco (3), City of Grapevine, Town of Highland Park, North Texas Tollway Authority, City of Plano, City of Richardson, and Tarrant Regional Water District.
- 2. Stormwater Education Events Calendar

The purpose of the Stormwater Education Events Calendar

(<u>www.nctcog.org/envir/SEEclean/stormwater/meetings/calendar/index.asp</u>) is to provide a common location for organizations to post information about upcoming stormwater-related events going on across the region. A total of 8 stormwater-related events were posted to this calendar. The following 3 organizations hosted these events: Dallas Water Utilities (2), City of Fort Worth (2), and City of Mansfield (4).

See item 5 under "Lawn and Garden Care" for Texas SmartScape-related events.

3. Annual Cooperative Purchase

To maximize group savings for program participants, the Regional Stormwater Management Program conducts one purchase annually of several education and outreach-related items. The goal is to combine as many orders as possible to achieve the lowest unit cost. The items cooperatively purchased in April 2014 for the purpose of distributing, displaying, and/or installing are listed in the following table. Table 5: Items purchased in the Fiscal Year 2014 cooperative purchase and those organizations that purchased them.

that purchased mem.		Durchanad By
Item	Qty.	Purchased By
Texas SmartScape bookman	rks (see i	tem 1 under the "Lawn and Garden Care" section)
Dog waste bookmarks (see	item 1 ur	nder the "Pet Waste" section)
Dea waste-bag dispensers (	see item	2 under the "Pet Waste" section)
Vord waste brochures (see	tem 1 un	der the "Yard Waste Section)
Eat tranner hans (see item 1	under th	he "Fats, Oils, and Grease section)
FOC funnals (see item 2 un	der the "	Fats Oils, and Grease section)
FOG door hangers (see iter	n 3 unde	r the "Fats, Oils, and Grease" section)
FOG door hangers (see her	er the "E	ats Oils and Grease section)
Grease ins (see item 4 and		City of Bedford, City of Duncanville, City of Hurst, and
Zip-its	624	City of Richardson
		City of Allen, City of Azle, City of Frisco, City of Grand
The sumb morthors	7,470	Prairie, Town of Highland Park, City of Hurst, City of
Plastic curb markers	1,410	North Richland Hills, City of Watauga, and City of Wylie
	1 000	
Aluminum curb markers	1,000	City of McKinney
Pollution prevention		The Cullebland Dark and City of Hurst
municipal training posters	18	Town of Highland Park and City of Hurst
municipal training postero		
Captain Crud activity	450	City of Duncanville and City of Mansfield
books	450	City of Bullearthine and any
USB car chargers	158	City of North Richland Hills
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Ammonia pitrogen kit	1	City of Grand Prairie
Ammonia nitrogen kit		

# Inlet Marker Order

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ATTN: ACCOUNTS PAYABLE E 385 S. GOLIAD 70 ROCKWALL, TX 75087

DATE 10/29/2014

# VENDOR 11563 - ALMETEK INDUSTRIES Reprint Purchase Order

ALMETEK INDUSTRIES Contact 2 JOY DRIVE HACKETTSTOWN, NJ 07840

**Receiving Hours** 8:00 am to 4:30 pm CST Monday - Friday

DELIVER BY SHIP VIA BEST FREIGHT TERMS FOBD PAGE 1 of 1 **ORIGINATOR:** Lea Ann Ewing

## **REFERENCE #** TOTAL COST STATUS UNIT COST \$5,223.04 DESCRIPTION 5,223.0400 UNIT Open QUANTITY Item - Markers 1.0000 Each \$5,223.04 TOTAL DUE for the annar Raymond DIRECT INQUIRIES TO: Authorized Signature

PURCHASING AGENT Lewing@rockwall.com

Submit invoices to the Bill To address at the top of the page, ATTN: Accounts Payable. PO Number must appear on all invoices, shippers, bill of landing and correspondence.
 Shipments will be refused if shipped COD, Collect and if the PO number is not shown on the shippers and bill of landing.
 Exempt from State/Local Sales Taxes. Federal Tax ID 75-6000652.

Special Instructions

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Storm Sewer Outfall Map

<u>CRM Trak Report of Drainage Reports through TrakIT</u> <u>Software</u>

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IH 5/30/2014 <<< ISSUE COMPLETED >>>	LETED >>>							
ISU1404-00094/7/2014         4/23/2014         Clogged Storm Drain         Streets & Drainage         Mario Aguila           Description:         A lady told me about a storm drain across from 2190 Fieldcrest with the cover not seated         I checked and she's right. Just needs someone with a key to drop it. Could you send someone to do it?         I would have but I don't have a key. Thank you IH 4/7/2014         Issue Created	14 4/23/2014 Clogged Storm Drain Streets & Drainage Mario Aguila A lady told me about a storm drain across from 2190 Fieldcrest with the cover not seated I checked and she's right Just needs someone with a key to drop it Could you send someone to do it? I would have but I don't have a key Thank you Ssue Created	Streets & Drainage om 2190 Fieldcrest with someone with a key to t I don't have a key Th	Mario Aguilar the cover not drop it Could ank you	Phone Call Resolution: T	Received his work order w	4/7/2014 as completed on 4-7-	one Call Received 4/7/2014 Storm drain not seated properly Resolution: This work order was completed on 4-7-14. We installed the storm lid back in its proper place	ace
<ul> <li>IH 4/7/2014 Assigned to Marcie Pickard</li> <li>IH 4/7/2014 Assigned to Mario Aguilar</li> <li>IH 4/7/2014 Status Changed to Received</li> <li>IH 4/7/2014 Status Changed to Received</li> <li>IH 4/7/2014 Sent Email to user Billy Chaffin (bchaffin@rockwall.com) - Issue submittal to Billy Chaffin of STREET Department</li> <li>IH 4/7/2014 Sent Email to user Mario Aguilar (maguilar@rockwall.com) - Issue submittal to Mario Aguilar of STREET Department</li> <li>IH 4/7/2014 Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Mario Aguilar of STREET Department</li> <li>IH 4/14/2014 Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Ricky Castillo of STREET Department</li> <li>IH 4/14/2014 &lt;&lt;&lt; ISSUE COMPLETED &gt;&gt;&gt;</li> </ul>	Assigned to Marcie Pickard Assigned to Mario Aguilar Status Changed to Received Sent Email to user Billy Chaffin (bchaffin@rockwall.com) - Issue submittal to Billy Chaffin of STREET Department Sent Email to user Mario Aguilar (maguilar@rockwall.com) - Issue submittal to Mario Aguilar of STREET Departme Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Ricky Castillo of STREET Departme 4 <<< ISSUE COMPLETED >>>	ockwall com) - Issue su Jrockwall com) - Issue s rockwall com) - Issue s	bmittal to Billy Cl submittal to Mario ubmittal to Ricky t	aatiin of STREET Aguilar of STREE Castillo of STREE	Department ET Department IT Department			
Description: Requested By Milton Hillgartner Address 505 Bessie street Phone 9727711695 Email milt0ne@prodigy net Issue Address/Location 505 Bessie street Debris in Drainage Ditch Issue Details When the streets w drainage problem at the end of Be washed away during a rain storm drainage ditch at the edge of our; ditch is filled with mud and leave provides drainage the tend of Be washed away during a rain storm haven't been able to remove clear Follow-up call No IH 5/6/2014 Assigned to Marcie Pickard IH 5/6/2014 Assigned to Marcie Pickard IH 5/6/2014 Status Changed to Received	Requested By Milton Hillgartner Address 505 Bessie street Phone 9727711695 Email miltône@prodigy net Issue Address/Location 505 Bessie street Debris in Dramage Ditch Issue Details When the streets were paved in our neighborhood there was a Issue Details When the streets were paved in our neighborhood there was a drainage problem at the end of Bessie St to the point where our yard was being washed away during a rain storm the city engineer asked permission to put in a drainage ditch at the edge of our yard to allow run off of rainwater That drainage drainage five cleaned most of the leaves but it needs to have the dirt that 1 haven't been able to remove cleaned out Thank you in advance Follow-up call No ssue Created Assigned to Marcie Pickard Assigned to Marcie Pickard	n our neighborhood thei gineer asked permission we run off of rainwater wer the neighborhood a aaves but it needs to hav ank you in advance	e was a d was being n to put in a That dramage nd no longer nd no longer ve the dirt that l	Resolution: T	äsk Completed 5	5-6-14 - 505 Bessie St	Resolution: Task Completed 5-6-14 - 505 Bessie St - Debris in drainage ditch (MARIO)	
IH 5/6/2014 Status Changed to Keecerved IH 5/6/2014 Sent Email to user Billy Chaffin (bchaffin@rockwall.com) - Issue submittal to Billy Chaffin of STREET Department IH 5/6/2014 Sent Email to user Mario Aguilar (maguilar@rockwall.com) - Issue submittal to Mario Aguilar of STREET Department IH 5/6/2014 Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Ricky Castillo of STREET Department IH 5/30/2014 <<< ISSUE COMPLETED >>>	Status Changed to Received Sent Email to user Billy Chaffin (bchaffin@rockwall.com) - Issue submittal to Billy Chaffin of STREET Department Sent Email to user Marto Aguilar (maguilar@rockwall.com) - Issue submittal to Marto Aguilar of STREET Department Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Ricky Castillo of STREET Department 4 <<< ISSUE COMPLETED >>>	ockwall com) - Issue su grockwall com) - Issue grockwall com) - Issue s	abmittal to Billy C submittal to Maric submittal to Ricky	haffin of STREET Aguilar of STRE Castillo of STREI	Department ET Department 3T Department			
	<ul> <li>14 5/24/2014 Clogged Storm Drain Streets &amp; Drainage N</li> <li>5-8-14 - 387 Bass Rd - House flooding - Contact Alex, 214 434 2521</li> <li>Issue Created</li> </ul>	Streets & Drainage infact Alex, 214 434 25	Mario Aguilar 521	Phone Call Resolution:	Received		House Flooding	

12/1/2014 3:43:42PM		For	CRN Advan • the Period	CRM Trak Report Advanced Issue Query For the Period 1/1/2014 thru 12/1/2014	ort Juery 1ru 12/1/201	4	_	Page 3
Issue No. Submitted Due N	Nature / Type	Category	Assigned	Created Via	Status	<b>Completed Date</b>	Issue Title	
<ul> <li>IH 5/8/2014 Assigned to Mario Aguilar</li> <li>IH 5/8/2014 Status Changed to Received</li> <li>IH 5/8/2014 Sent Email to user Billy Chaffin (bchaffin@rockwall.com) - Issue submittal to Billy Chaffin of STREET Department</li> <li>IH 5/8/2014 Sent Email to user Mario Aguilar (maguilar@rockwall.com) - Issue submittal to Mario Aguilar of STREET Department</li> <li>IH 5/8/2014 Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Mario Aguilar of STREET Department</li> <li>IH 5/8/2014 Sent Email to user Ricky Castillo (reastillo@rockwall.com) - Issue submittal to Ricky Castillo of STREET Department</li> </ul>	lar ved Chaffin (bchaffin@r 5 Aguilar (maguilar@ 7 Castillo (rcastillo@)	ockwall com) - Issue su }rockwall com) - Issue su rockwall com) - Issue s	bmittal to Billy C submittal to Maric ubmittal to Ricky	haffin of STREET ) Agular of STRE Castillo of STREE	Department ET Department ET Department			
ISU1405-00105/12/2014 5/28/2014 Clogged Storm Drain Streets & Drainage Mario Aguilar Description: Requested By Jody spedden Address 2750 fern valley lane Phone 8433279270 Email Jody spedden@att net Issue Address/Location 2750 fern valley lane Clogged Storm Drain Issue Details The drain at end of my driveway constantly has standing water After storms yesterday the cover is missing There is orange come in it so nobody drives over it or steps in it Follow-up call No	Clogged Storm Drain spedden valley lane @att net non e rann at end of my drivewa e cover is missing There	Streets & Drainage ny constantly has standr	Mario Aguilar ng water After iobody drives	Phone Call Resolution: N	Received fario reported that	5/12/2014 . It was a meter can c	ione Call Received 5/12/2014 Clogged Storm Drain @ 2750 fern valley lane Resolution: Mario reported that it was a meter can cover that was missing Shon Bellah is going to take care of it	f a
	kard ilar ived v Chaffin (bchaffin@ v Castillo (rcastillo@ ED >>>	rockwall com) - Issue s @rockwall com) - Issue @rockwall com) - Issue	ubmittal to Billy ( submittal to Mari submittal to Ricky	Chaffin of STREE to Aguilar of STRI A Castillo of STRE	T Department EET Department ET Department			
00115/12/2014 5/28/2014 scription: 5-12-14 - 157 Lake and not flowing out 949 698 3241 5/12/2014 Issue Created 5/12/2014 Assigned to Marci 5/12/2014 Assigned to Marci 5/12/2014 Status Changed to 5/12/2014 Sent Email to user 5/12/2014 Sent Email to user 5/12/2014 Sent Email to user	Clogged Storm Drain side Drive - Storm drain c i the other side of drainag e Pickard Aguilar Received Billy Chaffin (bchaffin@ Mario Aguilar (maguilari Ricky Castillo (rcastillo@	Streets & Drainage logged Said water was pipe Contact Lenore prockwall com) - Issue s @rockwall com) - Issue	Mario Aguilar s backed up Smith, Smith, submittal to Billy submittal to Mar submittal to Mar	Phone Call Resolution: 5 Chaffin of STREE 10 Aguilar of STR	one Call Received 5/27/2014 Resolution: 5-27-14 closed on Tue 5/27/2014 ffin of STREET Department guilar of STREET Department astillo of STREET Department	5/27/2014 Tue 5/27/2014	Clogged Storm Drain @ 157 Lakeside Drive	
ISU1408-00098/27/2014 9/12/2014 Clogged Storm Drain Streets & Drainage Description: 8-27-14 - 589 Primrose - storm drain in alley is damaged and sinking Eric Dickerson, 214 707 4393	Clogged Storm Drain ose - storm drain in alley	Streets & Drainage is damaged and sinkin	Mario Aguilar g Contact	Phone Call Resolution:	Received		Clogged Storm Drain @ 589 Primrose	

Total Issues: 9	<ul> <li>IH 8/27/2014 Issue Created</li> <li>IH 8/27/2014 Assigned to Marcie Pickard</li> <li>IH 8/27/2014 Assigned to Marcie Pickard</li> <li>IH 8/27/2014 Assigned to Mario Aguilar</li> <li>IH 8/27/2014 Status Changed to Received</li> <li>IH 8/27/2014 Sent Email to user Billy Chaffin@rockwall com) - Issue submittal to Billy Chaffin of STREET Department</li> <li>IH 8/27/2014 Sent Email to user Mario Aguilar (magullar@rockwall com) - Issue submittal to Mario Aguilar of STREET Department</li> <li>IH 8/27/2014 Sent Email to user Ricky Castillo (rcastillo@rockwall com) - Issue submittal to Ricky Castillo of STREET Department</li> <li>IH 8/27/2014 Sent Email to user Ricky Castillo (rcastillo@rockwall com) - Issue submittal to Ricky Castillo of STREET Department</li> </ul>	Issue No. Submitted Due	12/1/2014 3:43:42PM
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		Completed Date	14
		Issue Title	

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Training Certificates

Hours: 6.00 Stormwater Pollution Prevention Practices Mike dastrand North Central Texas Council of Governments Executive Director **Regional Training Center** Has successfully completed the required curriculum for **During Construction** Be it known that on September 26, 2013 Tim Duke Joldunie + Spithty Director of Registral Training

Mik Lington Executive Director Hours: 6.00	Stormwater Pollution Prevention Practices During Construction	Scott Schenkel Has successfully completed the required curriculum for	Be it known that on September 26, 2013	North Central Texas Council of Governments Regional Training Center	
Accduric Apithty Director of Registral Training	revention Practices struction	<b>Denkel</b> he required curriculum for	tember 26, 2013	ning Center	

TANA A A A	THE NATIONAL STO A NONPROFIT WWW.NP	nich. Cortman	IN RECOGNITION OF HAVING COMPLETED ALL REQUIRE STORMWATER INSPECTOR COURSE BY THE NATIONAL ST CERTIFICATION IS EFFECTIVE FOR A PERIOD	JIM RAINES	CERTIFICATE AND 1.2 CEUS(12 TRAINING	PERMIT COMPLIANCE INDUSTRIAL CONSTRUCTION MUNICIPAL NUNICIPAL	CERTIFIED STORMWATE	
	CERTIFICATE NUMBER DATE	5610 APRIL 11, 2014	5 ALL REQUIREMENTS OF THE CERTIFIED E NATIONAL STORMWATER CENTER. THIS FOR A PERIOD OF FIVE YEARS.	INES	2 TRAINING HOURS) AWARDED TO	MUNICIPAL INSPECTIONS COMMERCIAL INDUSTRIAL CONSTRUCTION ILLICIT DISCHARGE	TATER INSPECTOR FOLLOWING CATEGORIES	