STORM WATER QUALITY
2015 Annual Report

The City of
OKLAHOMA CITY

Storm Water Quality Management

The purpose of the Storm Water Quality (SWQ) Division is to provide inspections, enforcement, water quality assessments, public outreach and household hazardous waste services to citizens, businesses and government agencies so they can comply with the Clean Water Act and enjoy a safe and clean environment.

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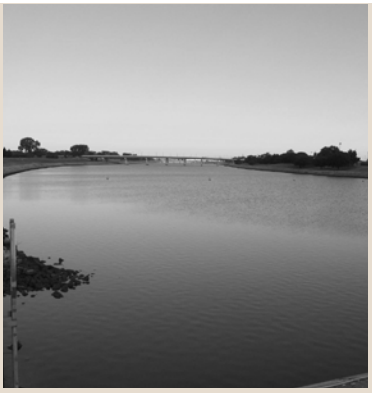
The Storm Water Quality Permit became effective on March 15, 2013 and will expire March 14, 2018

Storm Water Quality Permit

In compliance with the Oklahoma Pollutant Discharge Elimination System Act and the rules of the Oklahoma Department of Environmental Quality (ODEQ), the City of Oklahoma City, the Oklahoma Turnpike Authority (OTA) and the Oklahoma Department of Transportation (ODOT) were granted authorization to discharge storm water from the Municipal Separate Storm Sewer System (MS4).

The permit became effective on March 15, 2013 and will expire March 14, 2018.



Oklahoma River

Home and Garden Show

HHW Tour

Accomplishments

- Painted the exterior of the Households Hazardous Waste Collection Facility
- Ordered five new Dell Venue tablets for industrial inspectors
- Produced new quarterly visual monitoring training video
- Increased construction inspector in house training program
- Increased participation in the "Adopt A Street" program
- Submitted Lake Thunderbird TMDL Compliance and Monitoring Plans to ODEQ
- Installation of sand filter at fairgrounds
- Increased low impact development training
- Replacement of eight river debris barriers at tributaries of the Oklahoma River.

Goals

- Replace copier at HHW facility
- Refurbish paint crusher
- Complete business information list for industrial facilities
- Incorporate Lake Thunderbird TMDL into Construction and Industrial permitting
- Update municipal code to reflect Lake Thunderbird TMDL requirements
- Present storm water education program to 3,000 students
- Increase volunteer participation in "Curbs To Creek" program
- Host 2016 EPA Region 6 Stormwater Conference in Oklahoma City
- Develop and implement a long-term TMDL monitoring program in the Lake Thunderbird watershed
- Develop bid and contract for the laboratory analysis of water quality samples for the storm water quality division
- Purchase monitoring equipment required for TMDL monitoring in the Lake Thunderbird watershed

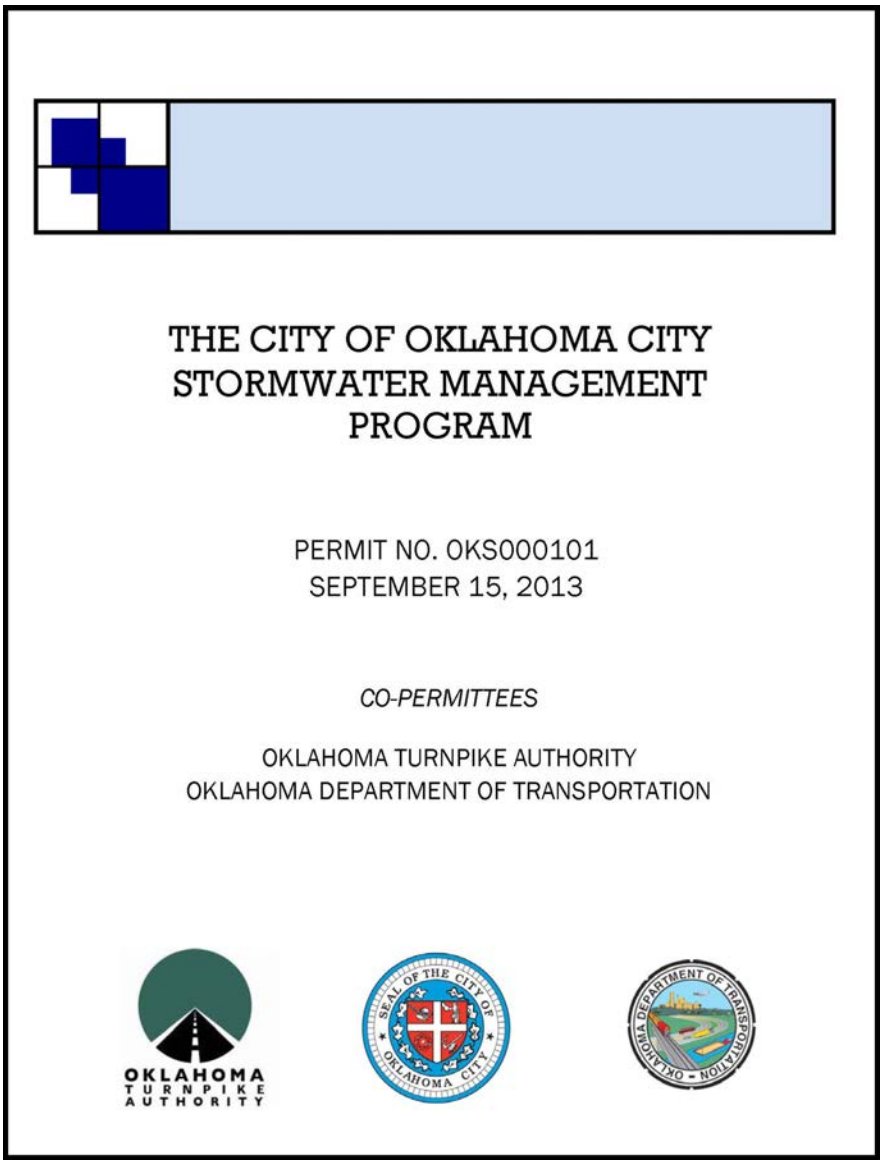
Rain Barrel Pick-Up Event


1,019 Rain Barrels Distributed


Resident Ordered Multiple Rain Barrels

Oklahoma River dam

Storm Water Management Program - The Storm Water Management Program (SWMP) is reviewed annually and updated as necessary. Updates were performed in 2013 to reflect any changes within the re-issued Oklahoma City Municipal Separate Storm Sewer System permit #OKS000101.



THE CITY OF OKLAHOMA CITY
STORMWATER MANAGEMENT
PROGRAM

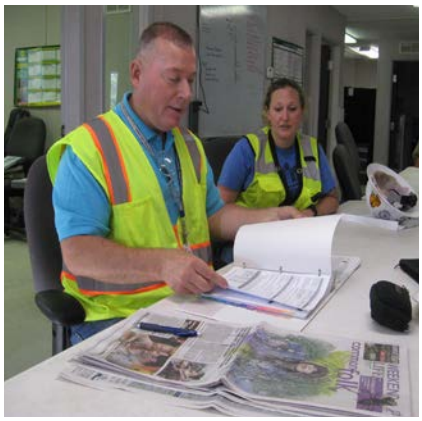
PERMIT NO. OKS000101
SEPTEMBER 15, 2013

CO-PERMITTEES

OKLAHOMA TURNPIKE AUTHORITY
OKLAHOMA DEPARTMENT OF TRANSPORTATION

OKLAHOMA TURNPIKE AUTHORITY

New and Re-Development Projects



Storm Water Quality reviewed 1,078 construction plans

The Public Works Department's permitting program requires a plan review process on all plans submitted to the City. During this process, check prints are sent to City departments for their review. The Storm Water Quality Division is part of that review process. Storm Water Quality requires that all plans submitted to the City must have an erosion control site plan and detail sheet. Every site plan is reviewed to ensure that Best Management Practices (BMP's) will be used to control erosion and sediment at the site. After each department has completed their review and a Storm Water Quality permit is obtained, a meeting with the engineer of record is set and City personnel review all remarks with the engineer. The engineer then submits the final set of plans with all the required changes for review. During the 2015 reporting period, 1,078 construction plans were reviewed by Storm Water Quality.

When the land disturbing activity is finished and perennial vegetation has been established on all exposed soil, the permittee will notify the manager and submit a Notice of Termination (NOT) for the project. A storm water construction technician will inspect the site to determine if one of the following conditions for the NOT have been met:

- site stabilized with a density of at least 70% of the original native vegetation, or
- all storm water discharges from construction activities have been eliminated, or
- if the owner/operator is no longer the owner/operator of the site, then a transfer of coverage to a different owner/operator must have been received.

Plans Reviewed January 1, 2015 through December 31, 2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	**Total**
Monthly Total	69	68	89	83	52	123	106	122	106	95	77	88	**1,078**

During 2015, 700 NOT's were approved

If the NOT is approved, a final inspection is approved and a Certificate of Occupancy is issued. During the 2015 reporting period, 700 NOT's were approved.

A re-inspection fee of $35.00 is assessed for each additional inspection of construction sites due to non-compliance. In 2015, a total of 190 re-inspection fees were assessed.

Each application for a storm water quality construction, land disturbing permit or an existing permit renewal is accompanied by a fee of $55.00. Permits expire one year from the date of issuance. Other fees include a late fee of $15.00 per month, and a permit re-issuance fee of $55.00.

If the work described in the permit has not begun within six months after issuance, the permit will expire and the permittee must re-submit all required forms and pay the reissuance fee in order to begin work.

The SWMP was revised to reflect the permit requirements of OKS000101 dated March 15, 2013, and includes criteria and procedures for determining requirements for structural and non-structural controls on new and significant reconstruction of roadways and highways.

Construction Notices of Termination January 1, 2015 through December 31, 2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	**Total**
Monthly Total	46	43	39	37	35	60	66	79	94	91	60	50	**700**

State Fair Park Sand Filter - State Fair Park has led OKC to become known as the "Horse Show Capital of the World." Annually, the park is host to multiple auto shows, arts and craft events, the Oklahoma State Fair and horse shows, among others. The state fair is the largest of these events in terms of the total number of visitors (about 900,000 people annually).

The volume of visitors to the grounds each year generates significant solid waste and storm water pollution. The storm water pollutants are carried untreated through the Municipal Separate Storm Sewer System (MS4) and fed into a nearby tributary which discharges to the Oklahoma River.

Construction of new sand filter

Multiple solutions were considered to address the pollution resulting from the direct and indirect discharge of contaminants which accumulate between rainfall events. Maintenance requirements, location, initial and long-term cost, treatment efficiency, aesthetics and available water quality data were each considered. The final decision was based, in part, on the primary pollutant which needed priority. In this case, historical water quality indicated excessive Biochemical Oxygen Demand (BOD) results. OKC staff recommended an underground sand filter as the most efficient and economical method for controlling BOD. Research indicates that sand filters remove relatively high amounts of total suspended solids (TSS) and fecal coliform bacteria. Total phosphorus removal efficiency is considered low to moderate.

Sand filter went online during State Fair in Fall 2015

Using funds from the 2007 Bond Authorization, construction began on the sand filter in January of 2015 and became operational in September. Roughly 818,000 gallons of storm water have been processed through the filter. Three months of operation has produced a calculated reduction of 39 lbs. of BOD and 262 lbs. of TSS.

Supporting the concept of "hotspot" treatment of known sources, 87% of the organic pollution removed by the sand filter occurred during the 10 days of the State Fair and the 4 weeks afterward. To date, the sand filter has been operated year-round. Staff anticipates that the sand filter will require regular maintenance every 1-5 years. The filter has been successful at achieving the intended goal of reducing organic pollution from the State Fair Park.

Hog Creek Project - Oklahoma State University (OSU), in conjunction with the Oklahoma Conservation Commission and Geographica, LLC conducted a project titled "Bioretention Cells for Mass Load Reduction of Phosphorus and Sediment in Urban Watersheds in Oklahoma" that was funded by the FY 12 §319(h) Special Projects.

Rain garden

A suburban neighborhood in Oklahoma City was selected as a demonstration site for five bioretention cells of varying types and scales to reduce phosphorus and sediment loading in Hog Creek and Lake Thunderbird. Both Hog Creek and Lake Thunderbird are on the EPA 303(d) list for low dissolved oxygen and turbidity, which are influenced by high levels of sediment and phosphorus in urban runoff. The five bioretention cells range in size from 200 to 8,800 sq. ft. and were designed to treat sub-catchment areas ranging from 0.5 to 8 acres. Site selection targeted locations with erosion and drainage issues and to add to the aesthetics to the landscape. Cell construction was completed in the spring 2014. The large bioretention cell was monitored for water quality in 2015 and showed water quality improvements. The bioretention cells were maintained by the property owners, with support from OSU, during the two-year period following construction.

Education & Outreach:

- Neighborhood education and outreach
- "Oklahoma Gardening" show, airing last week of October
- June 2014 workshop and tour with 21 participants

The cell was monitored between April and October 2015:

- Ortho P (mg/L) % decrease 65
- Total P (mg/L) % decrease 61
- Total N (mg/L) % decrease 39
- TSS (mg/L) % decrease 64
- Turbidity (NTU) % decrease 64
- E. coli (MPN/100 mL) % decrease 96

Oklahoma River

Flood Control Projects and Structural Controls

On December 11, 2007, Oklahoma City voters passed an $835.5 million bond issue, with all 11 propositions garnering at least 78% approval of the vote.

The largest portion, $497.4 million, is allocated to roadway improvements. Among other projects, the bond issue includes $89.7 million for parks and $32 million for drainage projects.

Public Works drainage engineering contracts a minimum of five contractors to maintain creeks, detention ponds and vacant lots that the City owns. This is a year-round process. At a minimum, during the summer months, each creek is mowed and litter removed on a regular basis. After heavy rain events, creeks are cleaned of litter. In 2015, approximately 48 miles of creeks were cleaned. The contractors also maintain 248 acres of detention ponds and 18 acres of City-owned vacant lots. The annual budget for these projects in 2015 was $1,626,744.

Public Works Drainage Maintenance Division is responsible for repairs made to drainage structures, concrete-lined channels, creeks and manholes. There were 1,402 repairs to drainage structures and 656 repairs to creek/concrete channels. Six staff members, with a budget of $934,300, provided routine maintenance repairs to the waterways, dams and locks on the Oklahoma River and removed 289 tons of debris in 2015.

The Public Works Storm Water Quality Construction Section and Engineering Division will continue to review construction plans for the development of retention/detention ponds for compliance with the Oklahoma drainage and flood control ordinances.

The City continues to evaluate, prioritize and install structural controls on developed areas and/or retrofit existing structures.

2015 drainage and pavement improvements are shown in the tables that follow.

Oklahoma River Boathouse District

Bond Auth Year	Proposition	PW Project No.	Location	Ward	Construction Estimate	Status
2007	4	DC-0133 PH 3	Detention pond in Oliver Park near SW 29th Street and Santa Fe Avenue.	4	$1,231,848	Construction
			DRAINAGE CONSTRUCTION TOTAL:		$1,231,848	
2007	4	DC-0271	Drainage improvements in Brock and Twin Creek near SW 19th	6	$5,746,594	Final Design
2007	4	DC-0187 PH2	Detention pond in the vicinity of N Pennsylvania Avenue and NW 122nd Street (Phase II)	8	$3,500,000	Preliminary Design
			DRAINAGE DESIGN TOTAL:		$9,246,594	

Bond Auth Year	Proposition	PW Project No.	Location	Ward	Construction Estimate	Status
2000	1	PC-0241 PH 2	Meridian Ave, SW 29th St to Oklahoma River (ODOT Agreement)	3	$2,598,618	Construction
2000	1	PC-0352/WC-0695/SC-0770	Western Avenue, NW 164th Street to NW 178th Street	8	$4,189,695	Construction
2007	1	PR-13-13/14	Meridian Avenue, Portland Avenue, NW 36th, NW 23rd (NW Quadrant)	1	$1,600,000	Construction
2007	1	PR-7-14/15	Meridian Ave, Portland Ave, NW 36th St, NW 23rd St - NE Quadrant	2	$1,675,067	Construction
2007	1	PR-8-14/15	Meridian, Portland, NW 36th, NW 23rd- SE Quadrant	2	$1,255,657	Construction
2007	1	PR-3-13/14	Douglas Avenue, Post Road, SE 29th Street, SE 44th Street (This PR complete the entire square mile) A.13	4	$473,330	Construction
2007	1	PR-8-13/14	"Anderson Road, Hiwassee Road, SE 74th Street, SE 89th Street A.14"	4	$319,168	Construction
2007	1	PR-12-13/14	Eastern Avenue, Bryant Avenue, SE 89th Street, SE 104th Street	4	$955,323	Construction
2007	1	PR-11-14/15	Pennsylvania Avenue, Western Avenue, SW 89th St, SW 104th St SE Quadrant	5	$2,250,000	Construction
2007	1	PR-9-13/14	Pennsylvania Avenue, Western Avenue SW 89th Street, SW 104th Street (NW Quadrant)	5	$1,106,107	Construction
2007	1	PR-4-13/14	Eastern Avenue, Bryant Avenue, SE 29th Street, SE 44th Street (This PR completes the entire square mile) A.23	7	$901,908	Construction
2007	1	PR-11-13/14	"Kelley Avenue, MLK Blvd, NE 23rd, NE 10th - Phase 3 (NW Quadrant) A.26"	7	$2,284,075	Construction
2007	1	PC-0413	Anderson Road, SE 59th Street to SE 74th Street	4	$5,284,400	Construction
2007	1	PC-0414	Anderson Road, SE 44th Street to SE 59th Street	4	$3,400,000	Construction
2007	1	PC-0433	Bryant Avenue, Interstate 240 to SE 89th Street	4	$3,985,700	Construction

Bond Auth Year	Proposition	PW Project No.	Location	Ward	Construction Estimate	Status
2007	1	PC-0427	Choctaw Rd, SE 59th Street to SE 74th Street	4	$2,733,775	Construction
2007	1	PC-0437	Choctaw Rd, SE 74th Street to SE 89th Street	4	$2,733,775	Construction
2007	1	PC-0419	NE 122nd Street, Coltrane Road to Sooner Road	7	$3,112,407	Construction
2007	1	PC-0420	NW 122nd, Council Road to County Line Road	8	$4,041,056	Construction
2007	1	PC-0378T	Portland Avenue, SW 104th Street to SW 74th Street	3	$3,900,000	Construction
2007	1	PC-0447	Sunnylane Avenue, Interstate 240 to SE 89th Street	4	$3,218,583	Construction
2007	1	PC-0461 PH 1	Council Road, State Highway 152 to 1/2 mile north of SW 29th Street	3	$1,795,998	Construction
2007	1	PC-0461 PH 2	Council Road, One Half Mile North of SW 29th Street to SW 8th Street Phase 2	3	$1,199,608	Construction
2007	1	PC-0482	Lottie Street, NE 4th Street to NE 8th Street	7	$285,182	Construction
2007	1	PC-0354	May Avenue, NW 10th Street to Reno Avenue	6	$2,310,000	Construction
2007	1	PC-0424	NE 13th Street, Lincoln Boulevard to Lottie Street	7	$1,300,000	Construction
2007	1	PC-0463	NW 10th Street, Meridian Avenue to MacArthur Boulevard	3	$1,067,138	Construction
2007	1	PC-0464	NW 10th Street, Portland Avenue to Meridian Avenue	3	$1,067,138	Construction
2007	1	PC-0465	NW 10th Street, Rockwell Avenue to Council Road	1	$964,589	Construction
2007	1	PC-0466	NW 10th Street, Walker Avenue to Western Avenue	6	$305,000	Construction
2007	1	PC-0467	NW 11th Street, Shartel Avenue to Walker Avenue	6	$188,600	Construction
2007	1	PC-0421-II	NW 23rd Street, Ann Arbor Avenue to Peniel	3	$2,750,000	Construction
2007	1	PC-0468	NW 8th Street, Shartel Avenue to Walker Avenue	6	$181,931	Construction
2007	1	PC-0349	**Western Avenue , NW 36th Street to NW 63rd Street**	**2**	**$2,975,247**	Construction
			STREETS CONSTRUCTION TOTAL:		$68,409,074	

Bond Auth Year	Proposition	PW Project No.	Location	Ward	Construction Estimate	Status
2007	1	PC-0326	KELLEY AVE, NE 63RD ST TO WILSHIRE BLVD	7	$4,430,000	Final Design
2007	1	PC-0446	Britton Road, County Line Road to Morgan Road	1	$2,714,195	Final Design
2007	1	PC-0415	Bryant Avenue, NE 122nd Street to Memorial Road TC-0437 / PC-0415	3	$2,900,000	Final Design
2007	1	PC-0418	Kelley Avenue, Hefner Road to NE 122nd Street	7	$3,160,500	Final Design
2007	1	PC-0460	Kelley Avenue, NE 122nd Street to Memorial Road	7	$2,300,000	Final Design
2007	1	PC-0451	Morgan Road, SW 44th Street to SW 29th Street TC-0436 / PC-0451	3	$2,600,000	Final Design
2007	1	PC-0452	NW 150th Street, Meridian Avenue to MacArthur Boulevard	8	$3,121,336	Final Design
2007	1	PC-0350	NW 164th Street, Portland Avenue to May Avenue	8	$2,542,000	Final Design
2007	1	PC-0435	Pennsylvania Avenue, NW 178th Street to NW 192nd Street	8	$3,047,000	Final Design
2007	1	PC-0436	Pennsylvania Avenue, NW 192nd Street north to City Limits	8	$1,522,153	Final Design
2007	1	PC-0432	Reno Avenue, Czech Hall Road to Cemetery Road	3	$2,700,000	Final Design
2007	1	PC-0457	Sunnylane Avenue, SE 89th Street to SE 104th Street	4	$2,500,000	Final Design
2007	1	PC-0441/BC-0200	N Western Ave, NW 178th St to City Limits/North Western Avenue north of NW 192nd Street	8	$3,124,196	Final Design
2007	1	PC-0458	NW 10th Street, Pennsylvania Avenue to May Avenue	6	$1,671,794	Final Design
2007	1	PC-0423	NW 23rd Street Interstate 44 to Tulsa Avenue	2	$1,770,000	Final Design
2007	1	PC-0423	NW 23rd Street Interstate 44 to Tulsa Avenue	3	$1,770,000	Final Design
2007	1	PC-0423	NW 23rd Street Interstate 44 to Tulsa Avenue	6	$1,770,000	Final Design
2007	1	PC-0459	Western Avenue , NW 18th Street to NW 23rd Street	2	$1,300,000	Final Design
2007	1	PC-0477	MacArthur Boulevard NW 150th Street to NW 164th	8	$2,135,000	Preliminary Design

Bond Auth Year	Proposition	PW Project No.	Location	Ward	Construction Estimate	Status
2007	1	PC-0476	Classen Drive, in the vicinity of NW 10th Street to Harvey Avenue and NW 8th Street	6	$1,600,000	Preliminary Design
2007	1	PC-0478	Harrison Street, NE 4th Street to Interstate 235	7	$550,000	Preliminary Design
2007	1	PC-0479	Hudson Avenue, Reno Avenue to Relocated Interstate 40	6	$1,635,518	Preliminary Design
2007	1	PC-0480	Kelley Avenue, NE 23rd Street to NE 50th Street	7	$3,610,000	Preliminary Design
2007	1	PC-0483	Martin Luther King Boulevard, NE 4th Street to NE 10th Street	7	$134,000	Preliminary Design
2007	1	PC-0498	Reno Avenue, Lincoln Boulevard to Martin Luther King Boulevard	7	$2,500,000	Preliminary Design
			STREETS DESIGN TOTAL:		$57,107,692	

Construction storm water quality discharge permits totaled 1,289 active permits

Construction Site Runoff

A construction storm water quality discharge permit is required prior to the start of all land disturbing activities for the construction of:

- New utilities
- Industrial, commercial or institutional facilities
- Residential subdivisions
- Demolition of structures

It is the responsibility of the owner/operator to secure the permit. A total of 654 construction storm water quality discharge permits were issued in this reporting period for a total of 1,289 active permits.

As permits are issued, they are entered in the V360 Accela Automation permitting database. This database provides multiple departments within the City a solution to automate their workflow. It manages all land use and community development activities such as permits, inspection and reviews, zoning, project plans and code enforcement. The program provides multiple City departments the ability to track, change and share information regarding permitted activities.

Construction Permits Issued January 1, 2015 through December 31, 2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Monthly Total	56	47	59	60	48	69	66	57	49	53	41	49	654

A total of 8,353 construction site inspections were completed during this reporting year.

Construction field laptops are fully ruggedized. The laptops enable the technicians to complete their work more efficiently. The speed and dependability allow technicians to immediately load their audits, input the data, print and/or email the results to site operators.

If the operator is not at the site, a call will be made following the inspection to discuss any deficiencies. If the deficiencies are not corrected, a Notice of Violation (NOV) will be issued to the operator, with a date set for the site to be in compliance. If the site is not in compliance on the set date, an Affidavit of Probable Cause will be filed with the City's Municipal Counselor's office. A total of 97 Notices of Violation were issued and 6 affidavits processed for construction-related activities during this reporting period.

Staff completed 8,353 construction site inspections

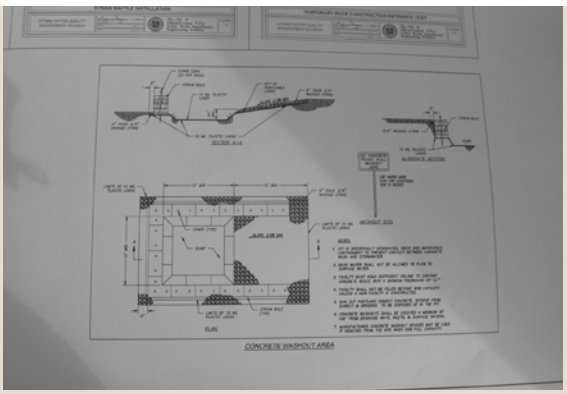
Construction Site Inspections January 1, 2015 through December 31, 2015													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	**Total**
Monthly Total	693	675	748	793	472	716	790	779	759	630	629	669	**8,353**

Under the Quality Assurance Program, 131 inspector audits were conducted

During the 2015 reporting period, the construction environmental unit supervisor conducted 131 inspector audits under the Quality Assurance Program (QAP). The QAP is an internal program where the supervisor will ride-a-long with the inspector and record how the technician performs an audit. This allows the technician to ask questions and ensures that audits are being performed consistently with federal and state guidelines.

Construction Notices of Violation by Quarter for 2015					
	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Total
Quarterly Total	14	51	21	11	97

Preparing for Sod



Erosion Control Site Plan

Riversport Rapids Facility

Storm Water Quality held the Annual Storm Water Construction Workshop on October 27th at the Oklahoma City Zoo Events Center. Raymond Melton presented "What We Do in OKC." Dr. Jason Vogel, Assistant Professor and Stormwater Specialist, at Oklahoma State University gave two presentations "Difference Between Erosion Control and Sediment Control" and "Post Construction LID." The workshop closed with a panel discussion with Raymond, Jason and David Phillips.

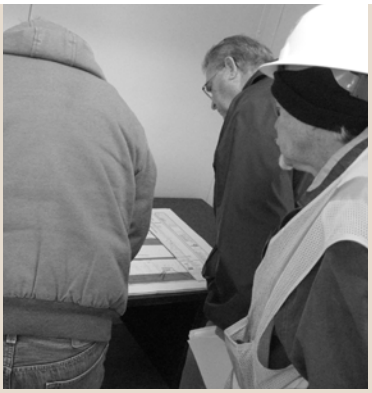
Forty-eight participants attended the Annual Storm Water Construction Workshop

Attendees were asked to complete a survey after the workshop:

- *"I had not attended the Construction SW workshop in several years, although I have attended the Industrial SW workshop. I brought some new employees to this session, and I was very impressed with your presentation. The workshop covered the topics very thoroughly and was very useful for our new staff members. Well done, keep up the good work."*

- *"I am new to storm water work so this was very interesting to me."*

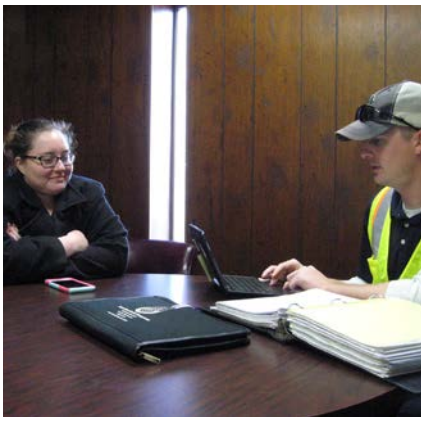
The workshop was from 7:45am – 12:00pm with 48 attendees.



Staff Review of Plans

Storm Water Quality Outreach Display

Secondary Containment



A total of 743 industrial facility audits were performed in 2015

Industrial and High Risk Runoff

In order to minimize the impact of storm water discharges from industrial facilities, the storm water quality program includes an industrial storm water permitting component. Operators of industrial facilities that are in one of the 11 categories of storm water discharges associated with industrial activity that discharge or have the potential to discharge storm water to a Municipal Separate Storm Sewer System (MS4) or directly to waters of the United States, require authorization under an NPDES industrial storm water permit.

Permitting requires that a Notice of Intent (NOI) be submitted along with the permit fee. A Storm Water Pollution Prevention Plan (SWPPP) for the facility must be kept on site. A total of 30 new industrial storm water discharge permits were issued during this reporting period, for a total of 438 active permits.

Industrial Discharge Permits Issued January 1, 2015 through December 31, 2015					
	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Total
Quarterly Total	12	6	7	5	30

Permitted businesses located within the City limits are audited on a regular basis. The intent of these audits is to reduce or eliminate the potential to pollute the surface runoff at each facility. An industrial environmental technician screens these businesses, and other facilities with the potential to cause pollution, for inclusion in the semi-annual industrial auditing program. During this reporting period, a total of 743 industrial facility audits were performed.

Industrial Facility Audits January 1, 2015 through December 31, 2015													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Monthly Total	35	54	53	43	46	96	98	99	42	64	46	67	743

An "Industrial Audit Report" is completed and discussed with the company representative. Any deficiencies are noted on the report and discussed at the time of the inspection. Upon the next inspection, if the deficiencies have not been corrected, a Notice of Violation (NOV) will be issued. If the facility remains deficient, SWQ will begin enforcement procedures with Oklahoma City's Municipal Counselor's Office. During this reporting period, a total of 13 Notices of Violation relating to industrial discharge activities were issued. The majority of NOV's were issued for failure to maintain SWPPP documentation (site inspections, visual monitoring, annual report) and affidavits were for failure to maintain/obtain permits.

A total of 13 notices of violation relating to industrial discharge were issued

Industrial Notices of Violation Issued January 1, 2015 through December 31, 2015					
	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Total
Quarterly Total	1	2	4	6	13

A re-inspection fee of $35.00 is assessed for each additional inspection to facilities due to non-compliance. In 2015, eight industrial facility re-inspection fees were assessed.

A $15.00 per month late fee applies to facilities and/or properties that have failed to renew their permit prior to its expiration.

In 2015, 29 new No-Exposure Certifications issued for a total of 763

A No-Exposure Certification (NEC) for exclusion from storm water quality permitting is issued to industrial facilities that meet strict guidelines. A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. The owner/operator is required to submit the certification form once every five years and must allow the local SWQ industrial environmental technician to perform inspections to confirm the conditions of no exposure.

During the reporting period, 29 new no-exposure certifications were issued for a total of 763. This is a decrease of 126 permits from last year.

In 2015, industrial environmental technicians continued the five-year re-certification process for businesses with an existing industrial no-exposure certification. During this reporting period, 179 re-certifications were completed.

Industrial No-Exposure Certifications Issued January 1, 2015 through December 31, 2015					
	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Total
Quarterly Total	4	4	2	19	29

Cosmetic cleaning permits are issued to companies using any system or machine to remove undesirable substances from any surface or façade creating free foreign matter. This includes carpet cleaning and power washing companies.

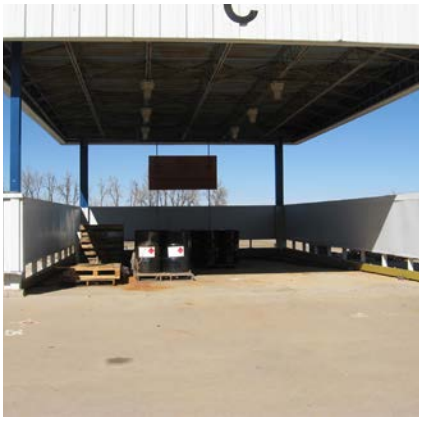
In 2015, SWQ continued the self-audit process. Each active permittee was mailed a self-audit form approximately one month before the permit expired. A total of 138 self-audits were performed in 2015. During the reporting period, a total of 28 new cosmetic cleaning permits were issued for a total of 207 active permits.

The two day industrial workshop had 340 attendees

Cosmetic Cleaning Permits Issued January 1, 2015 through December 31, 2015					
	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Total
Quarterly Total	9	4	9	6	28

The Industrial Storm Water Section held a two day workshop in the spring and a two day workshop in the fall during this reporting period. A total of 340 attended the workshops. Industrial workshops and training sessions included the following topics:

- Guidelines and regulations
- Quarterly visual monitoring
- Spill remediation
- Documentation for your SWPPP
- Networking opportunities
- SWPPP examples available for review
- Education on latest rules and regulations
- Fine tune your current program or build a new program from scratch

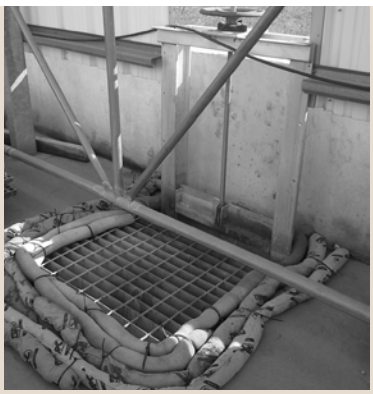


Twenty-eight facilities permitted as "high risk" no-exposure

As a part of Oklahoma City's permit requirements from the Environmental Protection Agency (EPA) and the Oklahoma Department of Environmental Quality (ODEQ), the City is requiring all Emergency Planning & Community Right to Know Act (EPCRA) Superfund Amendments and Reauthorization Act [SARA] Title III, Section 313 reporters (Toxic Release Inventory [TRI] facilities), Treatment, Storage, and Disposal (TSD) facilities, and municipal landfills that do not qualify for no-exposure, to establish a 5-year "high risk" storm water runoff sampling event in conjunction with all other permit requirements.

There are 64 industrial facilities that were required to submit quantitative "high risk" data to the City of Oklahoma City by December 31, 2015. No-exposure facilities that are in the "high risk" classification are not required to sample their sites. There are currently 28 permitted "high risk" no-exposure facilities, and one permitted Affidavit of No Discharge "high risk" facility.

Data collected by the industrial facility to satisfy the monitoring requirements of an OPDES or NPDES permit may be used to satisfy the "high risk" sampling requirement, provided that each of the required constituents are analyzed. The City requires that the indicated industrial facilities conduct self-monitoring and report the analytical results to the City's Storm Water Quality Division once every five years.



Containment Socks

Containment Bins

Tray Under Scrap Bin

After testing, if it is determined that the constituents are above any state, federal or local criteria, then remediation, further testing and/or additional best management practices may be required.

The Affidavit of No Discharge for storm water discharges associated with industrial activities program is utilized to certify that a condition of no discharge exists at an industrial facility or site. The affidavit is to be re-submitted at least once every five years. The industrial facility operator must maintain a condition of no discharge at its facility or site in order for the no discharge exclusion to remain applicable. If conditions change which result in storm water discharges into the waters of the State, including Municipal Separate Storm Sewer Systems (MS4s), the facility operator must obtain authorization to discharge under a storm water permit before any discharges occur beyond the boundaries of the facility. There are a total of 12 active no discharge permits.

Proper storage of drums

Industrial Audit

Drip Containment

Industrial Audit

Forty-three vendor inspections were completed during the 2015 Oklahoma State Fair

The Quality Assurance Program (QAP) is an internal program which consists of a supervisor performing monthly ride-a-longs with an environmental technician. During the ride-a-long, the supervisor records how the technician performs an audit. Criteria such as "Were City safety policies followed (PPE, driving, etc.)?", "Was all documentation reviewed for updates and compliance?", and "Was enforcement required and performed properly?" are noted. This allows the technician to ask questions and ensure that audits are observed and being performed consistently with federal and state guidelines. During 2015, there were 27 QAP industrial audits performed.

2015 Oklahoma State Fair - The Industrial Section trained 765 food vendors, in conjunction with the Oklahoma City County Health Department, regarding the proper disposal of wastewater and grease. The Industrial Section conducted 43 vendor inspections during the state fair, which included the setup and dismantling of vendor booths and rides.

Household Hazardous Waste/Used Motor Vehicle Fluids

Mobile Collection Event - an outreach program designed to collect household chemicals from citizens in the neighborhoods where they live. Not only does this program allow staff to educate residents on identifying household hazardous chemicals and proper disposal methods, the program also provides a remote service to the elderly and homebound residents of Oklahoma City. Doing the right thing couldn't be easier. Just drive or walk by and drop off your leftover household hazardous waste products.

There were five mobile collection events held with 565 participants and a total of 101,236 pounds of waste collected. Two special collection events were held at the Oklahoma State Fairgrounds to accept tires, e-waste, medications and ammunition for recycling or disposal. Three special neighborhood collection events were also held for Putnam Heights, McNabb Park and Windsor Oaks residents. The hazardous wastes received at the special collection events were properly packaged for transportation and disposal. Special collection events will continue to be provided during 2016.

Mobile events collected 101,236 pounds of waste

Collection Event Location	Participants	Collected Waste (lbs.)
Putnam Heights Neighborhood Collection (3/7/2015)	34	1,443
Special Fairgrounds Collection (4/11/2015)	354	68,995
McNabb Park Neighborhood Collection (4/18/2015)	2	119
Windsor Oaks Neighborhood Collection (6/6/2015)	48	811
Special Fairgrounds Collection (10/17/2015)	127	29,868

State fairgrounds fall collection

Opened in 2003, the permanent Household Hazardous Waste Collection Facility (HHWCF) diverts hazardous materials from the municipal waste streams and provides numerous benefits:

- An opportunity for waste reduction education
- Allows for the recovery of materials as resources
- Reduces toxicity of solid waste landfills and wastewater systems
- Helps the public to avoid improper disposal practices
- Protects waste processing equipment and handlers from exposure to hazardous materials

Oklahoma City's HHWCF, conveniently located near the I-40 and I-44 junction, is within a 20-mile radius of over 450,000 households. The HHWCF was designed to accommodate a high volume of traffic and manage large quantities of household hazardous waste on an annual basis. The HHWCF serves the citizens of Oklahoma City, covering 620 square miles.

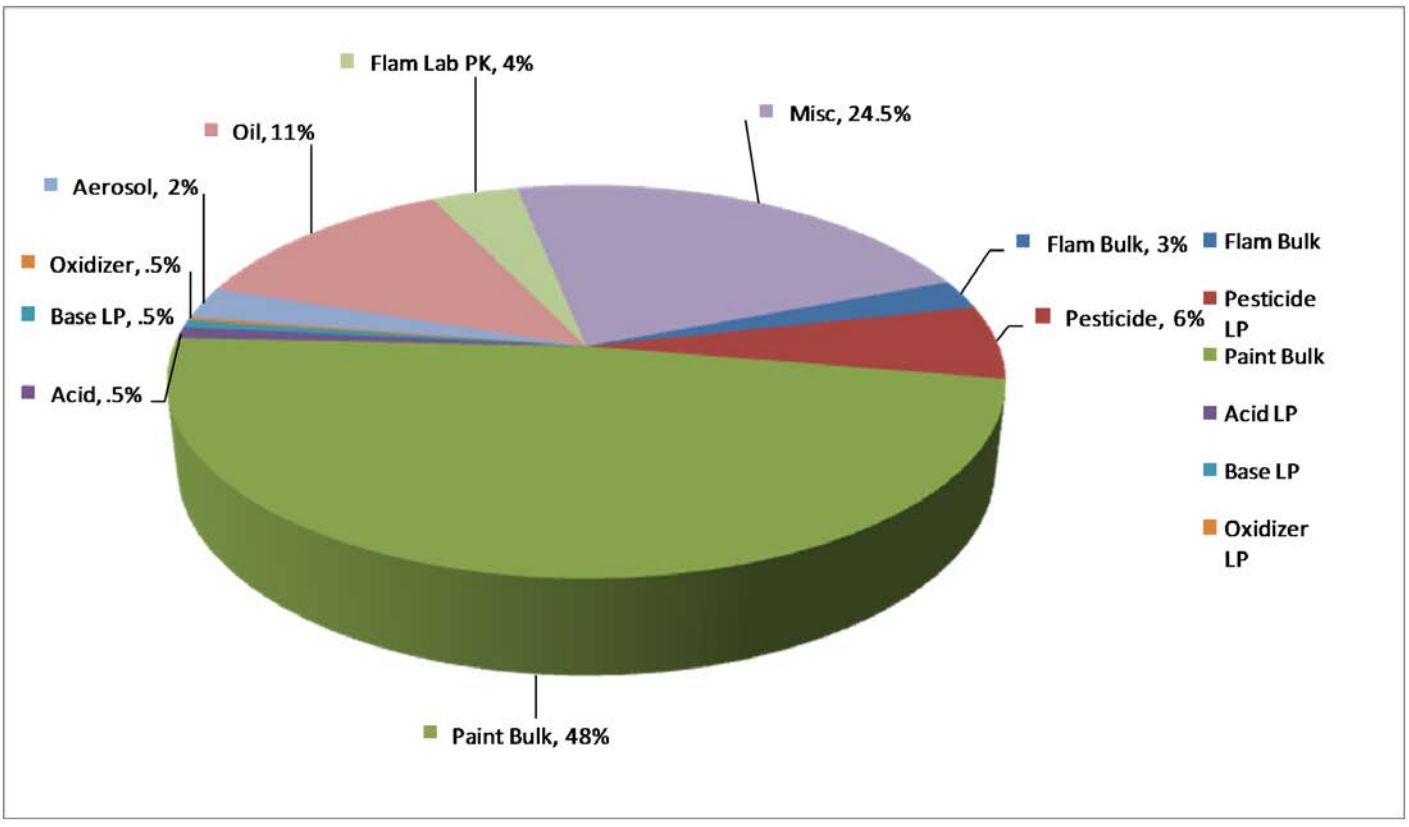
The HHWCF provides a safe and economical process for managing a full range of hazardous materials. Typical types of household hazardous waste received include cleaning products, automotive products, flammable products, lawn and garden chemicals, indoor pesticides, workshop/painting supplies and other products containing hazardous materials.

Due to permit restrictions, unacceptable wastes include: radioactive materials, high-pressure gas cylinders, biohazards, explosives, PCB containing materials, dioxins and highly reactive chemicals.

Wayne Drop and Rumble visit staff

Citizens Served January 1, 2015 through December 31, 2015													
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	**Total**
Monthly Total	554	391	638	1193	952	950	812	1038	721	1039	580	461	**9,329**

	Total Pounds of HHW Received in 2014 (excludes SWAP)	Total Pounds of HHW Received in 2015 (excludes SWAP)
Flam Bulk	19,046	15,704
Pesticide	38,051	39,638
Paint Bulk	286,068	312,698
Acid	5,628	6,265
Base	3,490	3,933
Oxidizer	2,154	1,734
Aerosol	18,130	17,169
Oil	65,152	82,672
Flam Lab Pack	25,531	25,989
Misc.	162,399	145,508
Totals	**625,649**	**651,310**



The HHWCF received 651,310 pounds of household hazardous waste for recycling or disposal. Additionally, 37,933 pounds of household hazardous waste were collected, separated and released to the public for reuse.

A total of 689,243 pounds of household hazardous waste was received and processed by the HHWCF.

HHWCF tour

Pounds of Waste Received by Month in 2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Monthly Total	40,985	24,679	39,057	116,562	62,290	60,261	49,595	62,858	45,364	87,559	36,843	25,257
Grand Total 651,310 Pounds												

Drive-thru convenience at the HHWCF

The City has developed a Memorandum of Understanding (MOU) which allows citizens residing outside the City limits to utilize services offered at the HHWCF. This offers an excellent opportunity for the surrounding Phase II communities to work with the City in properly managing household hazardous waste. Currently, the City has an active MOU with The City of Edmond, The Village, Yukon, Shawnee, Moore, El Reno, Warr Acres, Bethany and Tinker Air Force Base.

Municipality	Participants	Collected Waste (lbs.)
Bethany	249	41,645
Edmond	70	7,470
El Reno	6	623
Moore	281	18,239
Shawnee	9	1,058
Village	77	9,026
Warr Acres	128	16,994
Yukon	28	4,731
Total	**848**	**99,786**

Citizen Comments

OKC Hazardous Household Waste,

Thank you for arranging and organizing paint drums for Neighbor Alliance's, I "Heart" my neighborhood project with the Catholic Heart Workcamp volunteers!

The event truly would not have been successful without the donations of paint to rehab 10 homes and 1 church in 4 different neighborhoods. I appreciate your time and efforts, thank you again!

Have a fun and safe holiday!

Barbie Smalley
Neighborhood Alliance

"Working to create safe, attractive, and healthy neighborhoods throughout Central Oklahoma."

Catholic Heart Work Camp project

Carnival for Stand Watie Elementary School

Public Outreach

Storm Water Quality has a variety of outreach programs that include outreach to local neighborhoods, schools, and businesses. Some of the programs offered are Curbs to Creeks, Adopt a City Street, and a variety of workshops. In 2015, Storm Water Quality continued the "Protecting Our Water Resources" program for Oklahoma City schools. Storm Water Quality also hosted six training workshops and two Household Hazardous Waste special collection events. In addition to hosting events, Storm Water Quality reaches out to the public by using a variety of media outlets. For example, the Household Hazardous Waste Facility was featured in a commercial shown on a variety of cable networks such as Discovery, National Geographic, and the Travel Channel. These 30 second advertisements were shown over 1,300 times during the spring campaign.

The Storm Water Quality Downstream Newsletter is an effective communication tool, distributed quarterly, to deliver its message on clean water issues. The newsletter is circulated through e-notices to 2,204 subscribers.

2015 News Releases

- January 12, 2015 - Residents encouraged to conserve water with rain barrels
- March 9, 2015 - Residents encouraged to conserve water with rain barrels
- March 9, 2015 - Earth Day Festival at Martin Nature Park
- March 27, 2015 - Residents encouraged to conserve water with rain barrels
- April 3, 2015 - Special collection set for computers, tires, ammunition, and medications
- June 8, 2015 - Residents encouraged to fight mosquitos by reporting standing water
- August 25, 2015 - Special collection set for computers, tires, ammunition, and medications

Earth Day at Martin Nature Park

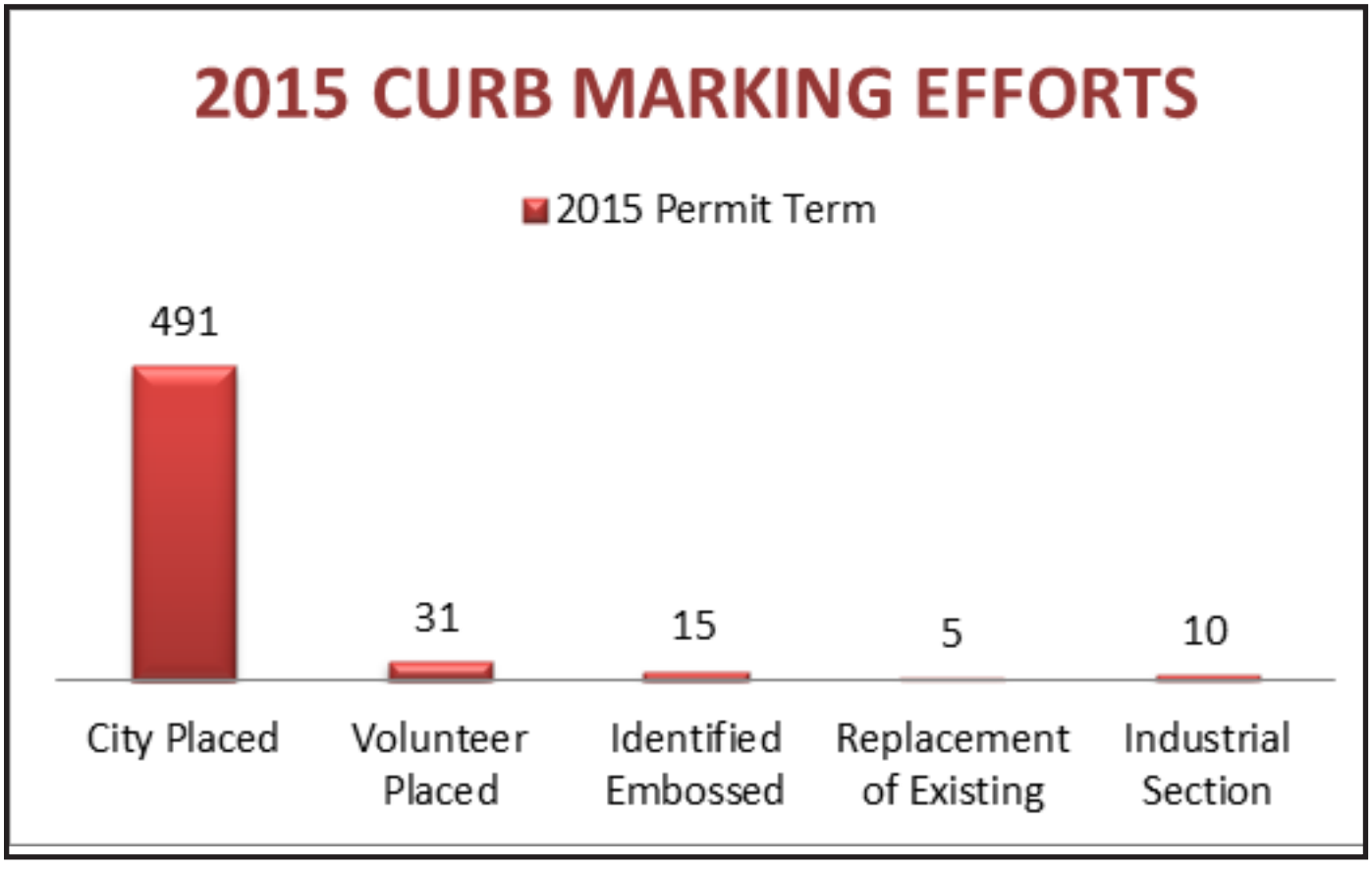
The Protecting Our Water Resources program is for elementary school students throughout Oklahoma City. The program teaches students about water quality and pollution using hands-on activities. The program was also featured at school assemblies. Students had the opportunity to participate and be hands-on since most of the presentations were given in classrooms with 20-30 students at a time. Nine Oklahoma City public schools participated in the program and 2,349 students participated in the program in 2015. Ten Oklahoma City public schools showed interest in the program and may participate in the future.

Wayne Drop visits Heronville Elementary School

Public Participation and Involvement

Curbs to Creeks - As provided in Part III.A Implementation and Augmentation of SWMP(s), SWMP component 7(b) "Install an average of 500 curb markers annually using volunteers and City employees". Storm Water Quality personnel and volunteer groups installed, replaced, or identified 552 curb markers during the 2015 permit term. After installation, all markers affixed in the field were recorded into a field book and entered into the City's Geographic Information System database.

Industrial Audit Section inspectors continued encouragement of permitted industries to participate in the program. Information regarding the Curbs to Creeks Program was added to presentations to industries attending the spring and fall industrial workshops.



Storm drain marking kits were distributed to two (2) organizations, the Oklahoma Turnpike Authority and Girl Scout Troop #456, during the 2015 permit term. Volunteers installed 31 markers. The Storm Water Quality Outreach Program Cordinator began managing the volunteer portion of this program. Program targets are currently set to increase volunteer participation during the 2016 permit term.

Storm drain marking volunteer group

City employees installed 501 markers. Staff identified 15 locations which the storm drain inlets were embossed with a "Dump No Waste" message. Five (5) previously marked stations were replaced with new storm drain markers.

Adopt-A-City Street volunteers

Adopt-A-City Street Program - Residents of Oklahoma City can make a difference in their community by adopting a city street. Organizations, businesses, and individuals can participate in the program. The Adopt-A-City Street Program supports environmental stewardship while encouraging the spirit of volunteerism.

Additional information about the Adopt-A-City Street Program can be found at www.okc.gov/pw/adopt.html

Participants may adopt a city maintained street for a two-year period. A minimum of four (4) litter collection events are required each year. The participating group is also required to submit an Activity Request prior to each event and a Litter Collection Report after each event. Each group receives a sign installed at each end of their adopted street which remains in place until the group discontinues participation in the program. Other support from the City includes: orientation meetings, safety information, safety vests, work gloves, trash bags, and trash bag collection by the City's Solid Waste Division.

Volunteers in the program include groups of all sizes with individuals of all abilities. In 2015, 761 volunteers conducted 66 litter collection events that collected 609 bags of litter. This partnership between residents and city government has multiple social, environmental, public health, and economic benefits for all parties involved.

New Organizations for 2015

- AAA Insurance
- Boy Scouts of America Troop 177 – Church of the Servant
- Church of the Living God #355
- DCI- Duracoatings
- Northern Safety and Industrial
- OCU Law – Phi Alpha Delta
- River of Life Church
- SCW-1 FCPOA (First Class Petty Officer Association)
- Zeta Phi Beta Sorority, Inc.

Public outreach contacts consist of populations reached through various outreach efforts including presentations, news releases, or other media releases (interviews, radio announcements, etc.). Counts may include a viewing area population (often supplied by the media outlet) where contacts are based on demographic viewing areas and are estimated to the best ability of the providing source.

Nine new Adopt-A-City Street volunteer groups joined in 2015

Date	Program Event	Program Type	Total Contacts
1/7/2015	Superstructure	Tour	18
1/8/2015	What We Do	Presentation	25
1/12/2015	Press Release	Rain Barrels	290
1/12/2015	Interview	Rain Barrels	192,000
1/12/2015	Online News Article	Rain Barrels	900
1/17/2015	Newspaper Article	Rain Barrels	287,505
1/21/2015	Water Bill	HHW	202,956
1/16-18/2015	Home and Garden Show	Rain Barrels	350
1/23/2015	City News to Know	Rain Barrels	2,400
1/26/2015	Sustainability Newsletter	Rain Barrels	402
2/1/2015	Rain Barrel Promotion	Utility Bill	202,956
2/4/2015	School Activity	Presentation	247
2/11/2015	Volunteer Fair	Booth	450
3/1/2015	HHW	Advertisement	287,505
3/3/2015	What We Do/ Construction	Presentation	15
3/9/2015	Rain Barrel Promotion	News Release	290
3/9/2015	Earth Day	News Release	290
3/9/2015	Rain Barrel Promotion	News Broadcast	58,000
3/9/2015	Industrial Workshop	Email Blast	2,178
3/10/2015	Rain Barrel Promotion	News Broadcast	192,000
3/12/2015	What We Do/ Rain Barrels	Presentation	11
3/12/2015	Rain Barrel Promotion	News Article	287,505
3/16/2015	Rain Barrel Promotion	Utility Bill	202,956
3/20/2015	Rain Barrel Promotion	Pick-up Event	226
3/21/2015	Rain Barrel Promotion	Pick-up Event	77
3/23/2015	School Presentation	Presentation	30
3/23/2015	School Presentation	Presentation	30
3/25/2015	Curbs to Creeks	Facebook	12
3/27/2015	Rain Barrel Promotion	News Release	290
3/27/2015	Rain Barrel Promotion	News Article	287,505
3/31/2015	Rain Barrel Promotion	News Article	287,505
3/31/2015	Rain Barrel Promotion	Facebook	25
3/31/2015	Rain Barrel Promotion	Twitter	75
3/31/2015	Rain Barrel Promotion	Twitter	32,300
3/31/2015	SWQ First Quarter Newsletter	Newsletter	2,179
4/3/2015	HHW Special Collection	News Release	290
4/4/2015	Rain Barrels	Newspaper	287,505

Date	Program Event	Program Type	Total Contacts
4/7/2015	Protecting Our Water Resources	Presentation	30
4/7/2015	Protecting Our Water Resources	Presentation	30
4/7/2015	Protecting Our Water Resources	Presentation	30
4/11/2015	HHW Special Collection	Rain Barrel Cards	354
4/13/2015	What We Do	Presentation	17
4/14/2015	Protecting Our Water Resources	Presentation	25
4/14/2015	Protecting Our Water Resources	Presentation	30
4/14/2015	Protecting Our Water Resources	Presentation	30
4/14/2015	Protecting Our Water Resources	Presentation	30
4/16/2015	Protecting Our Water Resources	Presentation	30
4/16/2015	Protecting Our Water Resources	Presentation	30
4/18/2015	Earth Day Celebration	Booth	100
4/21/2015	Earth Day Celebration	Booth	300
4/22/2015	Earth Day Celebration	Booth	250
4/23/2015	Code Enforcement Workshop	Presentation	20
4/24/2015	Rain Barrels	HHW Brochures	177
4/25/2015	Rain Barrels	HHW Brochures	102
4/30/2015	School Fair	Booth	350
5/1/2015	Protecting Our Water Resources	Presentation	210
5/5/2015	Protecting Our Water Resources	Presentation	105
5/5/2015	What We Do	Presentation	2
5/6/2015	Municipal Leadership Dev. Class	Booth	30
5/7/2015	Protecting Our Water Resources	Presentation	95
5/8/2015	Protecting Our Water Resources	Presentation	95
5/11/2015	Protecting Our Water Resources	Presentation	120
5/11/2015	Industrial Workshop	Email Blast	2,182
5/12/2015	Protecting Our Water Resources	Presentation	90
5/13/2015	Protecting Our Water Resources	Presentation	60
5/13/2015	What We Do	Presentation	29
5/14/2015	Protecting Our Water Resources	Presentation	60
5/20/2015	Industrial Workshop	Workshop	113
5/21/2015	Protecting Our Water Resources	Presentation	60
5/21/2015	Industrial Workshop	Workshop	92
5/26/2015	Protecting Our Water Resources	Presentation	90
6/3/2015	Mosquito control	News Broadcast	192,000
6/9/2015	Mosquito Control	News Broadcast	72,000
6/10/2015	Mosquito control	City of OKC News Email	2,200

Date	Program Event	Program Type	Total Contacts
6/11/2015	2nd Quarter SWQ Newsletter	Newsletter	2,179
6/13/2015	Mosquito control	News Article	287,505
6/23/2015	Drainage Utility Fee	News Article	3,200
7/4/2015	HHW Promo Handouts	Freedom Festival	100
7/7/2015	OCCC	Volunteer Fair	500
8/1/2015	HHW	HHW Facility	202,956
8/13/2015	Whiz Kids	school presentation	42
9/9/2015	Pesticide Workshop	email blast	55
9/21/2015	Industrial Workshop	email blast	1,091
9/22/2015	Construction Workshop	email blast	1,000
9/25/2015	Industrial Presentation	presentation	44
9/25/2015	HHW Special Collection	news release	202,956
10/8/2015	Pesticide Workshop	workshop	36
10/8/2015	school fair	booth	490
10/10/2015	Oklahoma River	presentation	25
10/12/2015	Stormwater	presentation	27
10/14/2015	facility tour	HHW tour	16
10/16/2015	conference	presentation	87
10/16/2015	Industrial Workshop	email blast	1,091
10/17/2015	HHW special collection	newspaper article	287,505
10/20/2015	Industrial Workshop	workshop	52
10/20/2015	presentation	conference	45
10/21/2015	Industrial Workshop	workshop	83
10/22/2015	facility tour	HHW tour	27
10/23/2015	Construction Workshop	email blast	1,000
10/27/2015	Construction Workshop	workshop	68
10/29/2015	Trunk or Treat	festival style event	500
10/30/2015	DEQ Meeting	presentation	75
11/6/2015	facility tour	HHW tour	25
11/17/2015	newsletter	email	250
11/20/2015	survey	email	50
11/23/2015	activity letter	email	18
11/30/2015	Industrial Workshop	save the date email	1,091
11/30/2015	newsletter	webpage posting	1,750
12/9/2015	AACS Orientation	presentation	4
		TOTAL	**4,086,809**

The spring 2015 advertising campaign, to promote awareness of services provided by the HHWCF to the citizens of Oklahoma City and other metro municipalities, was planned and implemented. After evaluating a variety of advertising alternatives, staff determined that the most effective impact could be accomplished by utilizing the following media outlets during the 2015 ad campaign:

Household Hazardous Waste Facility advertisement

Print advertisements included:

The Daily Oklahoman was distributed to the following geo-targeted areas: Edmond, Yukon, Mustang, Piedmont, Deer Creek, NW Oklahoma City, Nichols Hills, The Village, Quail Creek, Moore, Oklahoma City (South), Midwest City, Del City, and Choctaw. These impressions were spread over a 4 month period.

The Oklahoma Gazette ran six, 1/4 page advertisements. The Gazette prints 55,150 copies that are distributed to over 800 drop sites in the metro area each Wednesday. An online edition is also published each week.

El Nacional De Oklahoma, a local Hispanic print media, printed three 1/4 page advertisements. The newspaper has over 400 rack locations throughout the central Oklahoma area. The advertisement was published once a month with 45,000 copies distributed each month.

Top - OSU students at the Earth Day celebration

Bottom - Participants at the Trunk-or-Treat event

Earth Day - Storm Water Quality celebrated Earth Day by participating in various festival style events. At our booths, we taught residents how to prevent storm water pollution and distributed information about positive environmental practices. The following are some of the outreach events Storm Water Quality participated in and the estimated number of visitors to our booths:

- Earth Fest at Martin Nature Park - 100 booth visitors
- Dell Earth Day Festival - 250 booth visitors
- OSU - OKC Earth Day Fair - 300 booth visitors

Trunk or Treat - The City hosted the 2nd Annual 'Trunk or Treat" event for City employees and their families on October 29th at the Police and Fire Training Center. More than 500 children and parents attended. Andrea Shelton, Rebecca Dallen, and Alicia Myrick wore costumes and distributed candy, stickers, coloring books about preventing storm water pollution. Kids even had the chance to meet the Storm Water mascot "Wayne Drop."

Central Oklahoma Storm Water Alliance - The City and the Central Oklahoma Storm Water Alliance (COSWA) partnered together to encourage residents to conserve water and reduce pollution through the use of rain barrels.

In 2014, the Oklahoma City Council passed an urban agricultural ordinance that allows a maximum of two 85-gallon rain barrels in the front yard. Any number of rain barrels can be placed on the side or back of a property, as long as they are not visible from the street. The containers must be securely covered and any openings must be covered with a screen that prevents infestation by insects and other pests.

COSWA, with the support of the Oklahoma Department of Environmental Quality, set up a booth at the January "Home and Garden Show" held at the fairgrounds park in order to promote the rain barrels and storm water pollution best management practices.

Other outreach strategies used during the promotion included advertisements, news releases, TV and radio, Facebook, utility bill inserts and information cards.

Oklahoma City held two pick up events in the Spring, with 1,019 rain barrels distributed.

COSWA combined efforts for a spring radio public outreach campaign with the slogan "Every Day Environmentalist." The campaign addressed environmental issues ranging from proper application of fertilizer, dumping grass clippings into drainage ways and illegal swimming pool draining. Approximately 350 spots, along with 275 bonus spots, were purchased at a cost of $15,000 during March and April. The estimated impressions totaled 2,408,100.

Top - Staff unloads truck of rain barrels

Middle - Staff members sorting rain barrels

Bottom - Staff assist with resident pick-up

Squeeze Every Drop's Dewey

Squeeze Every Drop - The City continued the SqueezeEveryDrop.com website to educate citizens on conserving water indoors and outdoors, along with the mandatory five-stage water conservation program. The website features "Dewey" – a cartoon water drop – who stars in two digital videos and tells the importance of "saving him" from going down the drain or street and other conservation tips. Postcards were mailed to all water customers to announce stage changes starting with Odd/Even watering.

Also, H2OKC, an electronic newsletter was created and launched in 2014. It is sent to subscribers bimonthly and shares information on water conservation, stage changes, drought tolerant plants, proper irrigation technology, fixing leaks, water-efficient appliances and fixtures, workshops and events. To further promote, four vehicles are wrapped with the Squeeze Every Drop message and serve as rolling billboards around Oklahoma City.

SqueezeEveryDrop.com

OKC Hefner Canal Goats - Water Quality's one-year trial goat program with Langston University ended October 21. That meant saying goodbye to the animals that ate away a lot of brush from the Hefner Canal. The only animals left were two goats and two sheep obtained from OKC Animal Welfare.

The goat project was such a great success that the Water Quality employees decided to continue the effort on their own and expand the 4-animal herd.

Now, the OKC goat herd is 30 animals strong including the existing 2 goats, 2 sheep and 2 donkeys plus 24 new nannies (female goats) recently purchased at the Oklahoma City Stockyards livestock auction.

The herd spends the winter at Lake Stanley Draper on five acres next door to the Reservoir & Canal Maintenance Facility. R&C crews had learned a lot about managing a goat herd from Langston's Dr. Steve Hart over the past year. Crews will make sure the animals have grain, hay and shelter during the winter. All animals will return to the Hefner Canal in the spring and resume working where the former Hefner Canal goats left off.

On November 30, Keep Oklahoma Beautiful held its annual awards Environmental Excellence Award event at the National Cowboy and Western Heritage Museum. And the winner is ... the Hefner Canal goats! They won first place in the Government Program category. It was the 25th annual banquet with nominees and affiliates from all 77 counties in Oklahoma. The event honored 65 finalists and 21 winners, including the City of Oklahoma City Utilities Department. The department won for Water Quality's work on the Hefner Canal Goat project.

The OKC Hefner Canal Goats eliminate the need for fuel and gas emissions, prevent damage and erosion and reduce employee injuries. In one month, they cleared 1.5 to 2.5 acres of land, saving the city nearly $45,000 in maintenance costs for mowers and equipment.

Solid Waste Management's first CNG fueling station

Trash trucks run on CNG - The Solid Waste Management Division formally opened the Utilities Department's first CNG fueling station in 2014. The CNG fueling station has 60 slow fill and two fast fill hoses in the back of the Solid Waste facility. That's where collection vehicles fuel up every evening to get ready to run the next day's routes. The CNG fueling facility has the capacity to fuel 60 vehicles at one time. Two fast fill hoses are open to the public at the CNG fueling station on Portland Avenue, adjacent to the Solid Waste Management Facility. One nozzle is for buses and commercial vehicles and the other for cars and pickups. The public site has the capability of adding two additional fast fill hoses without requiring additional underground work.

CNG fuels produce fewer emissions and decrease dependency on foreign oil products. The CNG fueled vehicles require less maintenance and decrease noise in neighborhoods. This alternative fuel also reduces fuel costs, improves overall safety and reduces the potential of hazardous fuel spills. CNG fueled vehicles are helping Oklahoma City promote a cost-effective clean alternative to liquid fuels.

The investment in CNG fuel is real proof of Oklahoma City's interest in green initiatives that will serve the Solid Waste Management Division and other City employees and Oklahoma City residents for many years. The Solid Waste Management Division took the city's commitment to alternative fuels to a higher level by offering CNG fueling to the public. Availability of CNG fuel is a key to moving Oklahoma City toward its commitment of more green initiatives for making the city even more livable.

Curbside Recycling - In 2015 the City's curbside recycling service collected 8,252 tons of recyclables from residential homes.

Employee Education

Training - Storm Water Quality staff members received 999 hours of training in 2015 to meet safety, license and certification training requirements. Safety topics included subjects such as hearing conservation, fire extinguisher safety, personal protective equipment, housekeeping, Department of Transportation hazardous materials, blood borne pathogens, hazard communication, fall protection and respiratory protection.

SWQ completed 999 training hours

Licenses - Licenses include Oklahoma Department of Environmental Quality Class "C" and "D" Water Works Operators, Class "B", "C" and "D" Wastewater Works Operators, Class "A" Wastewater Works Laboratory Operator, Confined Entry/Rescue and 40-Hour HAZWOPER.

Memberships

- Central Oklahoma Storm Water Alliance (COSWA)
- International Erosion Control Association (IECA)
- Local Emergency Planning Committee (LEPC)
- American Public Works Association (APWA)
- National Storm Water Center Certified Storm Water Inspector (CSI)
- Enviro-Cert International Inc. Certified Professional in Erosion and Sediment Control (CPESC)

SWQ staff attend a professional development course

Professional Developement - Professional development training included workshops, conferences, meetings, online seminars, tabletop excercises and presentations. Subjects included low impact development, best management practices, structural management practices, erosion & sediment control, emergency planning, post emergency assessments, disaster recovery, emergency public information systems, TMDL development & compliance, industrial permitting, nutrient removal, bioretention and water quality modeling.

Conferences and Workshops Attended

- Resource Management Conference
- Low Impact Development Conference
- StormCon Annual Storm Water Conference
- Annual EPA Region 6 Storm Water Conference
- International Erosion Control Association Conference
- North American Hazardous Material Management Association Annual Conference

Roadway Operations and Maintenance

The Public Works Department, Streets and Drainage Maintenance Division, manages the panning crews which provide maintenance of the curb inlets. Through this program, eight staff members are equipped with ten Vactor trucks, loaders, trucks and various other support vehicles/equipment used to remove sediment and debris from the storm sewer system. The reporting period budget was $1,000,000. Crews removed 568 tons (1,136,520 pounds) of debris during the permit term.

Oklahoma City uses a roadway inspection company called Fugro-Roadware to inspect the arterial streets, and two in-house pavement inspectors to evaluate residential streets. Inspections by Fugro-Roadware are completed by driving each arterial, while sensors collect the amount and type of distress on that road. These distresses are used to calculate a Pavement Condition Index (PCI), a scale of 0-100, according to American Society for Testing and Materials (ASTM) standards. The in-house inspectors use ArcGIS mobile application to record the type and amount of distress seen on the residential streets, and that is then used to calculate a CI using MicroPaver, which operates on the same ASTM standards. The final score for each segment, along with traffic count, citizen input and past treatments, is used to prioritize maintenance needs.

The SWMP was updated to include any roadway operation and management changes. The most recent revision was September 15, 2013.

Unlimited Sweepers & Cleaners LLC swept 21,773 curb miles during this permit period. The average amount monthly was 1,814 curb miles. A total of 3,957 tons of debris was collected.

A total of 21,773 curb miles were swept in 2015

Participants at the pesticide and fertilizer training class

Pesticide, Herbicide and Fertilizer Application

The City is required to provide at least one annual training/ educational event for City employees related to pesticide and fertilizer application.

To address this requirement, the Storm Water Quality Management Division facilitates and provides pesticide/fertilizer training. Our goal is to assure that every City employee that works with or applies pesticides is a Certified Applicator, Certified Service Technician or an applicator-in-training. This requires a close relationship with the Oklahoma Department of Agriculture Food and Forestry (ODAFF) to assure the appropriate regulatory training requirements are met, annual certification examinations are provided and consistent documentation and maintenance of Continuing Education Units (CEU) are achieved. Oklahoma State University's Cooperative Extension Service, in Stillwater and Oklahoma City, are essential resources in our technical pesticide, herbicide and fertilizer training.

Classes are publicized by e-mail, e-newsletter, word of mouth and fax communications. The Parks and Recreation Department, Public Works Department, Utilities Department and Oklahoma City Zoo personnel participate in the classes.

In accordance with the "Combined Pesticide Law & Rules: Title 2, Oklahoma Statutes, Section 3-81 through 3-86; 35:30-17-1 through 35:30-17-99", our CEU and initial classes cover:

- Laws and rules
- Pesticides (formulations, registrations, labeling and label comprehension, handling and storage, toxicity, and hazards)
- Application equipment and calibration
- Pests and Integrated Pest Management
- Identification of hazardous areas
- Drift prevention
- Endangered species
- Surface and groundwater protection
- Worker protection

Speakers and trainers are drawn from a knowledgeable and experienced group of professionals, including but not limited to: pesticide vendors, Oklahoma State University professors and instructors, ODAFF Inspectors, and City employees. The workshops are designed to provide guidance and up-to-date information to assist workers, using Best Management Practices.

Oklahoma City pesticide training class

The 2015 pesticide workshop took place on October 8th at the Mike DeGiacomo Training Facility with 36 people in attendance. Speakers for the workshop were Dr. Marley Beem, Jennifer Olson, and Dr. Mike Schnelle. General subject matter included aquatic plant management, diagnosis and management of diseased trees, and low pesticide plant materials.

This workshop offered two CEUs in Ornamental and Turf Outdoor (category 3a), Interiorscape (category 3b), Nursery/Greenhouse (category 3c), and Demonstration and Research (category 10). A total of 54 CEUs were earned during the training.

Storm Water Quality audit

Pesticide General Permit - Oklahoma City submitted a Notice of Intent to the Environmental Protection Agency for coverage under the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit in 2012. Permit coverage began on March 4, 2012. On December 20, 2012, ODAFF received authorization to regulate certain Pesticide General Permit activities in Oklahoma. To date, Oklahoma City has reported qualifying pesticide discharges to Waters of the Nation in 2012, 2013 and 2014. The 2014 Pesticide General Permit Annual Report was submitted to ODAFF on February 12, 2015 for applicable pesticide discharges to Waters of the Nation.

Four departments/authorities are currently identified in the Pesticide General Permit Management Plan as potential dischargers of qualifying pesticide applications. The Public Works Department reported four programs which include the West Nile Virus/Mosquito Program, Oklahoma River Maintenance Program, Guardrail Program and Channel Spraying Program. Parks and Recreation Department and the Utilities Department reported one program each; Slope Spray Program and Reservoirs and Canals Maintenance, respectively. The Oklahoma City Public Property Authority (OCPPA) reported four recreational areas; the James E. Stewart Golf Course, Trosper Park Golf Course, Earlywine Golf Course and the Lake Hefner Golf Course.

The Public Works West Nile Virus/Mosquito Program, Public Works Channel Spraying Program, OCPPA Lake Hefner Golf Course reported qualifying applications to Waters of the United States. 0.13 acres and over 208,589 linear feet qualified as reportable discharges. Five different pesticides were utilized and accounted for 3.7 pounds of solid product and over 140 gallons of liquid concentrate used to control mosquito populations and nuisance/hazardous vegetation.

Pollution Complaints and Spill Response Program

Storm Water Quality personnel responded to 479 Action Center requests

Action Center - In an effort to make neighborhoods a great place to live, the City provides a one-stop citizen assistance office. Citizens can contact the Action Center to report problems or get information about City services. When a problem is reported, the appropriate department is notified. The Action Center request is tracked and a letter is sent to the citizen to let them know the City is working on a solution. During the reporting period, SWQ personnel responded to 479 Action Center requests.

The online Action Center service request form makes it easier for citizens to find and accurately report problems in their neighborhood. The system now includes all valid Oklahoma City street addresses, an expanded list of service types and access to previously reported requests.

For citizens to report a problem, they simply select a request type such as: swimming pool water discharge, grass clippings being dumped into the MS4, or blowing dust and debris. Citizens may provide detailed comments and then submit the request. The system assigns the request a confirmation number that allows a person to check the status of the request at any time. Not only can citizens check the status of their service request, they can see if there are existing requests on a specific address.

Citizens are encouraged to use the on-line system to report non-emergency problems. The on-line service request form may be submitted 24 hours a day, seven days a week. Citizens may also report problems by calling the Action Center.

SWQ responded to 94 hazardous materials incidents

Hazardous Spills and Illicit Discharges Response - The Storm Water Quality Management Division responds as technical advisors to the fire department hazardous materials unit on emergency spill calls to ensure proper cleanup. SWQ environmental technicians are on-call 24 hours a day for response to spills and to serve as technical advisors to prevent/or mitigate contaminated runoff from entering the storm sewer system. During the reporting period, SWQ technicians responded to 94 hazardous material incidents.

SWQ environmental technicians also respond to pollution source investigations. Discharges can occur through illicit plumbing connections to the City's storm sewer system, deliberate dumping, or accidental spills. The program works to reduce the number of discharges by tracking and eliminating illicit connections, enforcing state and local statutes regarding illegal discharges, and responding to spills to ensure material containment and cleanup. During the reporting period, SWQ responded to 115 pollution source investigations.

Public Works Response Manager - Storm Water Quality utilized a new internal system to follow citizen concerns. The system, known as the public works response manager, allows employees to enter the citizen concern, assign the concern to the appropriate division, check the status of the concern and mark the item as complete. This system assists in the timely response to concerned citizens.

2015 Response Manager Results			
Subject	Created	Completion Date	Response Time (days)
FW: Bethany discharge location:Jan-20-2015	1/20/2015	1/20/2015	0
FW: Like Sludge Spill - NOT OKC:Jan-20-2015	1/20/2015	1/20/2015	0
FW: 12121 South Western Avenue:Jan-27-2015	1/27/2015	2/4/2015	7
FW: Street Sweeper Photos :Jan-29-2015	1/29/2015	1/30/2015	0
FW: John Ore:Feb-27-2015	2/27/2015	7/13/2015	135
Alice Classen 10804 NW 34th St.:Mar-04-2015	3/4/2015	3/6/2015	1
FW: Siena Phase I Addition (C-6320) and Chishlom Run Addition	3/23/2015	3/25/2015	1
Public Notification:Mar-25-2015	3/25/2015	4/2/2015	7
FW: Public Notice for 2015 Small MS4 General Permit OKR04:Mar-31-2015	3/31/2015	4/15/2015	14
FW: 9500 SW 44th St :Apr-02-2015	4/2/2015	4/9/2015	6
FW: N W 31st St, Sara Road :Apr-06-2015	4/6/2015	4/7/2015	0
FW: N W #!st St:Apr-06-2015	4/6/2015	4/7/2015	0
FW: City Government Confusion - Zoning/Building Permit	4/17/2015	4/16/2015	(1)
Science Museum Construction entrance:Apr-19-2015	4/19/2015	5/4/2015	14
FW: Urgent :Apr-21-2015	4/21/2015	4/30/2015	8
Dirt and Debris on EK Gaylord at SW 5th:Apr-30-2015	4/30/2015	4/30/2015	0
FW: Permission needed:Apr-30-2015	4/30/2015	5/4/2015	3
Jerry Teddy - SWQ:May-01-2015	5/1/2015	5/6/2015	4
424 SW 168th Michael Dunne:May-13-2015	5/13/2015	5/20/2015	6
FW: Willow Cliff Apartments:May-22-2015	5/22/2015	6/5/2015	13
FW: NW 23rd Street:May-22-2015	5/22/2015	6/10/2015	18
Joanne Stremlow 1125 N. Council Drainage Issues:May-28-2015	5/28/2015	6/5/2015	7
Erosion issue in Talavera third phase:May-29-2015	5/29/2015	6/5/2015	6
FW: Erosion problem in neighborhood (#2):Jul-06-2015	7/6/2015	7/7/2015	0
FW: Erosion problem in neighborhood still not resolved :Jul 2015	7/17/2015	7/23/2015	5
FW: EPA Request for information:Aug-10-2015	8/10/2015	8/26/2015	15
6th/Oklahoma Erosion Controls - The Metropolitan:Aug-10-2015	8/10/2015	8/11/2015	0
FW: Memorandum Recall and Reissue Municipal Citation Forms	10/1/2015	10/9/2015	7
FW: FOLLOW-UP: KINGSWOOD/AUTUMN LEAVES DRAINAGE PROBLEM INFO (1/3):Dec-09-2015	12/9/2015	1/20/2016	41

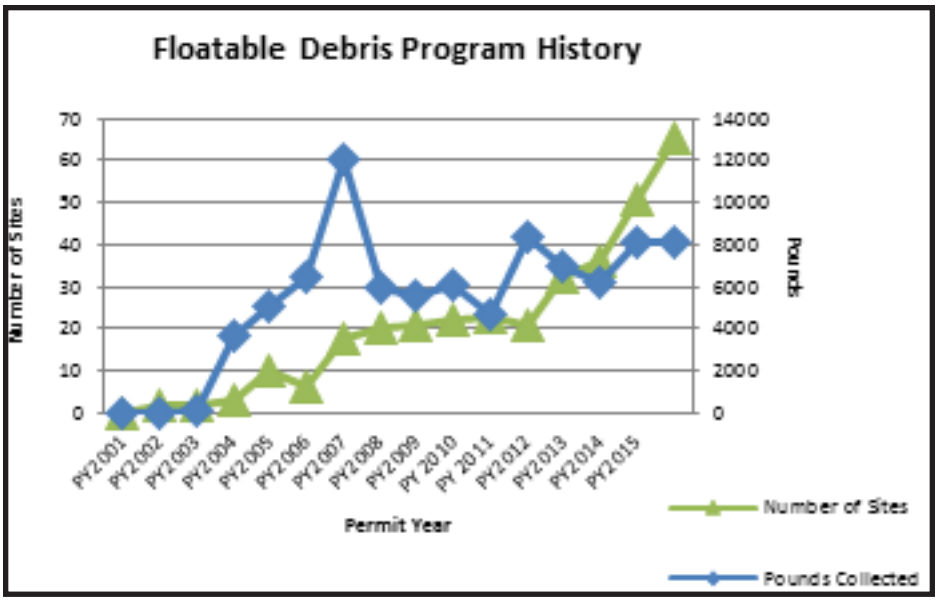
over 8,000 pounds of floatable debris collected from 65 sites

MS4 Monitoring - Floatable Monitoring Program

The floatable debris study was continued during the 2015 permit year. Sixty-five stations were selected for the study. Thirty-five floatable monitoring stations are located in the North Canadian River basin, eight in the Deer Creek basin and twenty-two in the Canadian River basin (Lake Thunderbird watershed).

Oklahoma City uses channel-wide netting, circular outfall netting, storm drain inserts and debris barriers to capture or contain floating debris from the drainage systems and waterways.

To reduce the discharge of floating debris into the Oklahoma River, twenty-six river debris barriers were installed in the Western Avenue, May Avenue and Eastern Avenue river basins. Fifteen barriers were installed in March 2008 and eleven barriers in August 2009. The barriers are continuously monitored and debris is removed on an as needed basis by City Oklahoma River Maintenance crews. As these structures are subjected to harsh environmental conditions, damage to the debris barriers has occurred. Eight debris barriers were replaced in 2013 and seven barriers in 2015.



The Floatable Debris Program is targeted to assess factors from human-generated debris carried into streams and storm drainage networks during elevated flow conditions. Quantities collected are expected to fluctuate with the volume of runoff associated with each individual storm event. Certain debris items, such as algal biomass and grass clippings, are also expected to fluctuate seasonally when algae metabolism slows or warm season grasses become dormant.

Removal and categorization of debris from the sixty-five stations was maintained after each rainfall event or on an as needed basis. The number of station visits ranged from one to thirty-one visits per station during the permit year. A total of 8,121 pounds were collected during the 595 site visits at the floatable debris monitoring stations. Approximately 830 pounds of trash was collected from these events. The remaining 7,291 pounds of the debris collected was classified as natural debris. The highest percentages of collected natural debris consisted of leaves, grass trimmings and tree clippings. The top human-generated litter percentages were plastics, paper/cardboard and metal/aluminum.

A subset of six floatable debris collections included an inventory of the items removed from the netting structures. Categorization of the litter resulted in the identification of 23 cups, 19 bags, 9 bottles, 5 cans, 122 wrappers, 8 straws, 32 utensils, 64 cigarettes and 1 peanut package.

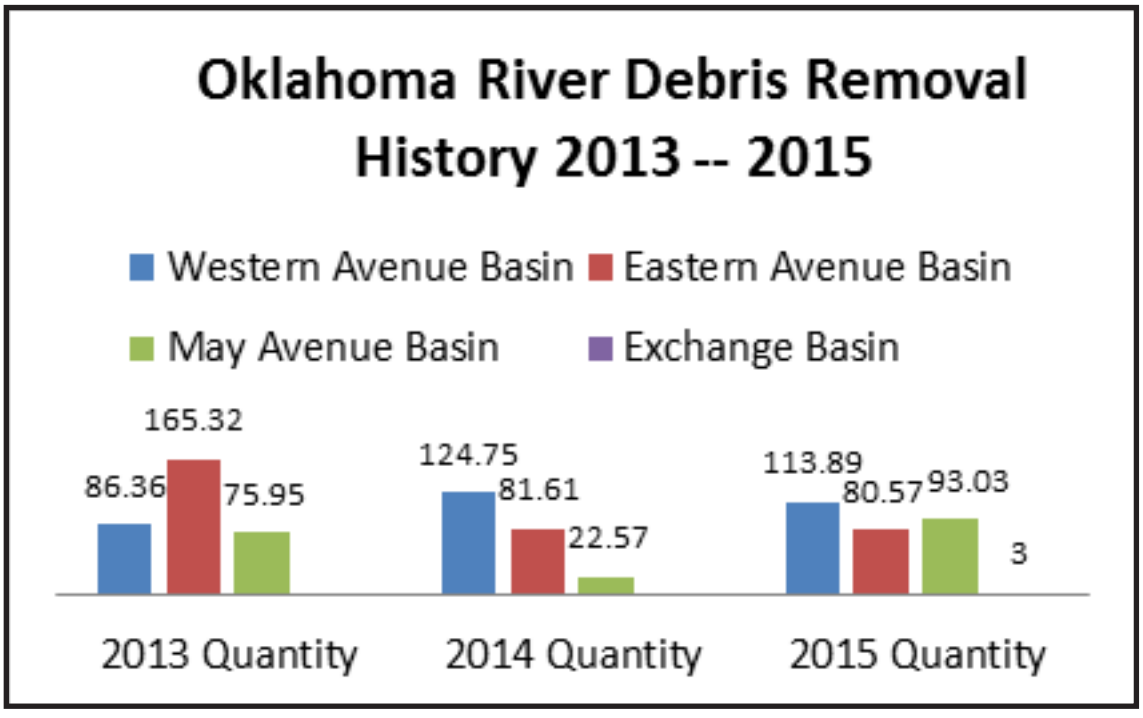
Floatable debris barriers along the Oklahoma River

Staff removed 290 tons of debris from the Oklahoma River

The Public Works Department, Streets and Drainage Maintenance Division provide a significant role with regard to the floatable debris removal program. On average, the Division employs six staff members to remove debris and provide maintenance in the impounded segments of the Oklahoma River. Seasonally, additional employees may be added on an as needed basis to provide increased support for the debris removal activities.

During 2015, the Oklahoma River Maintenance Crew removed and properly disposed of 290 tons of debris. Records are maintained for each basin.

The Western Avenue basin accounted for the highest amount of debris removed at 114 tons, followed by the May Avenue basin with 93 tons removed. Finally, in the Eastern Avenue basin 80 tons were removed and in the Exchange basin three tons of debris removed.



Wet Weather Analytical Monitoring

During the 2015 permit term, SWQ selected three stations to monitor; 85, 616 and 754. No optional stations were monitored during the permit term.

Accomplishments for this program included:

- 100% completion of the three permit required wet weather stations at a frequency of two times per permit year.

Permit Year 2015 Storm Event Monitoring Locations	
Site Number	Type
616	Permanent
754	Permanent
85	Permanent

Three stations were monitored in the 2015 permit term

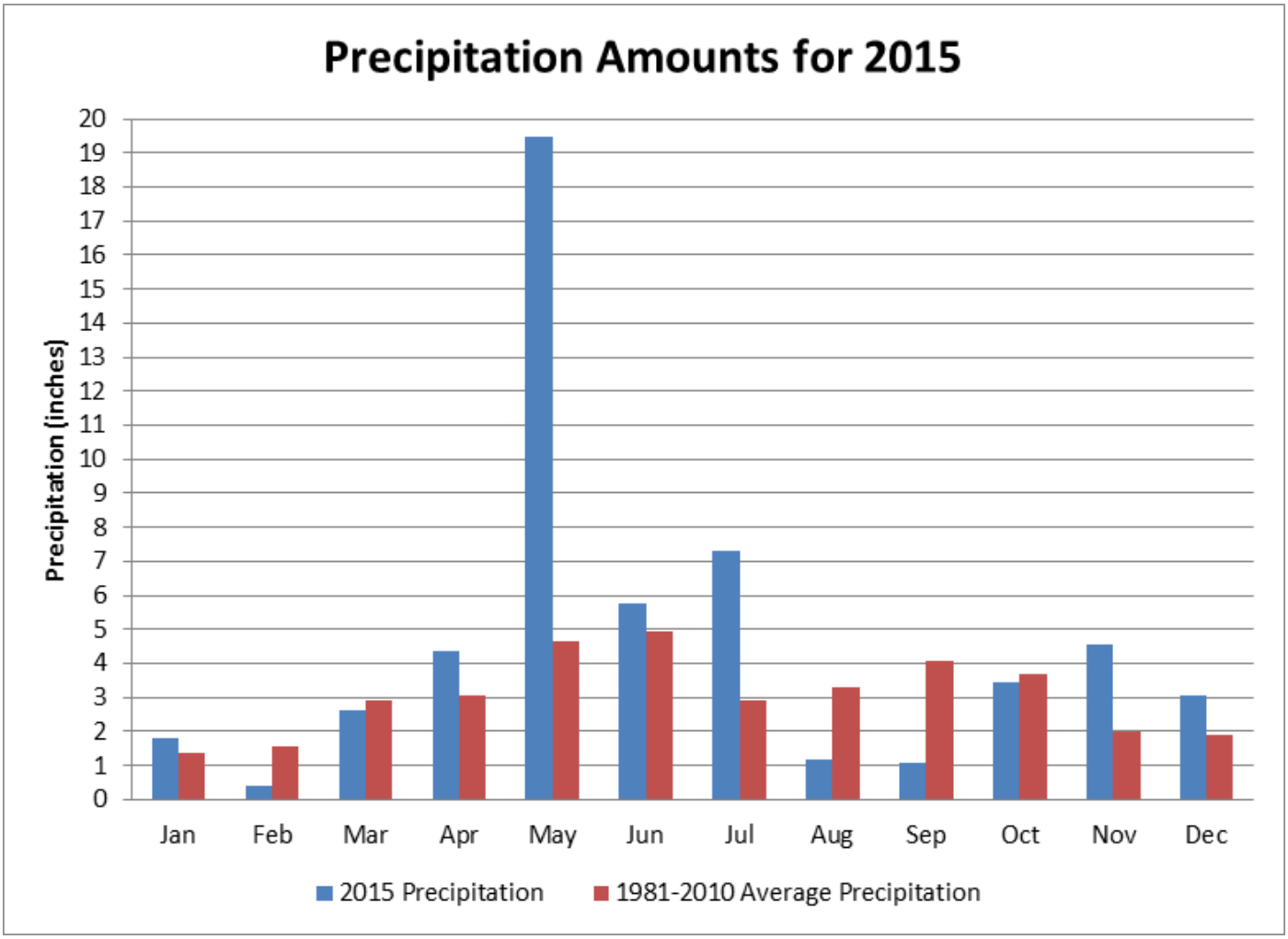
Wet weather sampling bottles

Precipitation Amounts for 2015 - Precipitation for the 2015 permit year is summarized in the following paragraphs, table and graph. National Weather Service historical records for Oklahoma City (Will Rogers World Airport) were researched for precipitation data. The 2015 monthly precipitation totals were compared to the corresponding 30-year average monthly totals from 1981 through 2010 to assess any precipitation surpluses or deficits.

The annual precipitation for Oklahoma City in 2015 was 55 inches, which was 18 inches greater than the 30-year average.

Monthly precipitation in Oklahoma City was above average for 58% of 2015.

Month	2015 Precipitation (inches)*	1981-2010 Average Precipitation (inches)**
Jan	1.80	1.39
Feb	0.41	1.58
Mar	2.62	2.90
Apr	4.35	3.07
May	19.5	4.65
Jun	5.77	4.93
Jul	7.31	2.93
Aug	1.17	3.28
Sep	1.06	4.06
Oct	3.44	3.71
Nov	4.57	1.98
Dec	3.07	1.88
Total	**55.05**	**36.36**

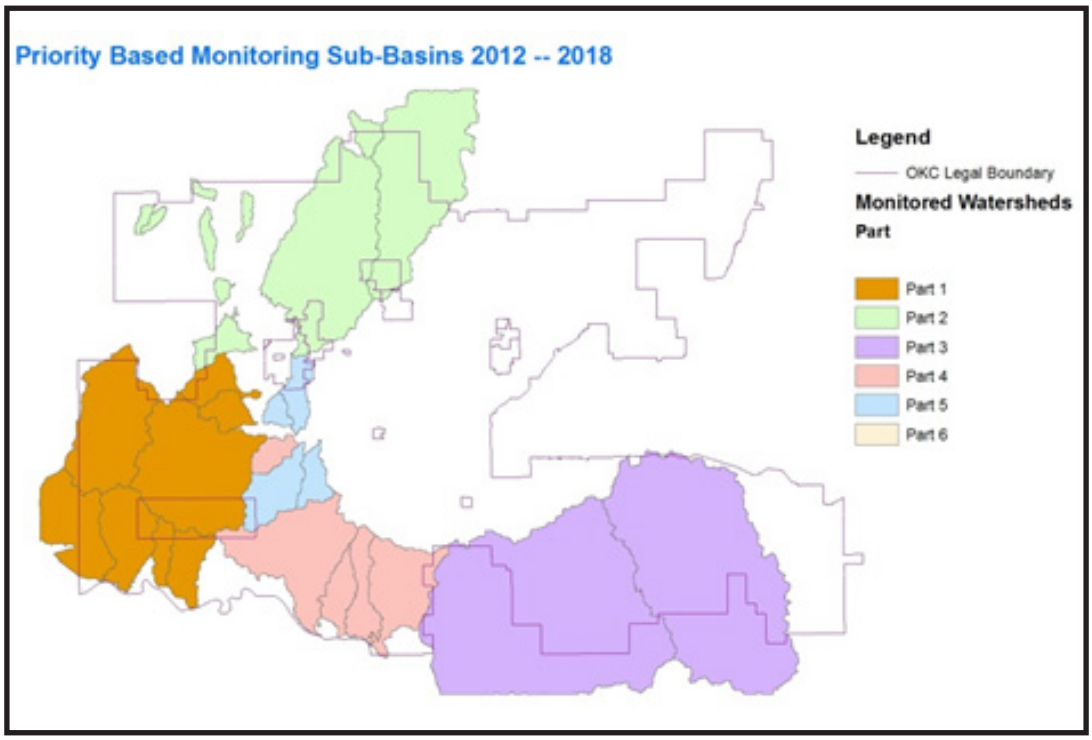

Precipitation Amounts for 2015
Precipitation (inches)
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2015 Precipitation
1981-2010 Average Precipitation

Staff monitor basins that are geographically grouped together for efficiency purposes

Priority Based Monitoring Program

The Priority Based Monitoring Program was developed to acquire additional information within basins identified during the Watershed Characterization Program as not meeting one or more State Water Quality Standard. Impairment listings identified in the most recent Integrated Report were used to prioritize additional watersheds for inclusion in the program. Quality Assurance Project Plans (QAPPs) were developed for each study basin. QAPPs describe the purpose, scope and quality assurance/quality control objectives for the monitoring efforts. The scope of the project is to identify specific sub-drainage areas which may be contributing to the impairment listing.

The initial planning stages for the project were implemented during late 2011 and early 2012. The anticipated project completion is expected to span two Municipal Separate Storm Sewer System Permit cycles. Part I monitoring requirement was initiated in April 2012. Basins selected for monitoring are generally grouped in geographically close proximity for efficiency purposes.



Program milestones are listed below.

- 50% Completion of final reporting for Part I
- 100% completion of Parts III monitoring efforts
- 100% completion of scheduled applicable Part III diel studies
- 100% completion of scheduled applicable Part III fish collections
- 20% completion of Part IV monitoring efforts

Locations selected for study will be visited during 30 fixed interval monitoring events

Water Quality Monitoring Activities – General Overview - The number of monitoring stations selected is based on the data needs of each study area. In situ monitoring and laboratory test parameters are determined based on information needed to describe any relevant water quality problems identified by previous water studies or external sources. Generally, each location selected for study will be visited during thirty fixed interval monitoring events over a fifteen month period of time. Other monitoring efforts, such as diurnal dissolved oxygen, caffeine, triclosan, indicator bacteria, optical brightener, conductivity and biological studies will be conducted seasonally or within any other relevant temporal or target weather conditions.

A tailored monitoring plan for each basin was developed by selecting from a large list of field observations and laboratory parameters. Stations will be monitored with a subset of laboratory parameters; including but not limited to total phosphorus, total nitrogen, nitrate as nitrogen, nitrate plus nitrite, biochemical oxygen demand (BOD), carbonaceous biochemical oxygen demand (CBOD) chemical oxygen demand (COD), E. coli, Enterococci, total suspended solids (TSS), sulfate, caffeine, triclosan, optical brightener, ammonia nitrogen and selenium.

In situ parameters may include: dissolved oxygen (grab and diurnal), swath based optical brightener, water temperature, specific conductance, discharge, oil & grease (visual), pH, habitat assessment, turbidity, total chlorine and free chlorine. Biological collections (fish) may be necessary at certain stations.

Priority Monitoring Part III - Water Quality Monitoring Summary - Twenty-one monitoring locations were selected in eleven sub-basins within the Canadian River watershed. The first sampling events were conducted on August 19-20, 2014 and continued through October 2015.

During the 2015 permit term, 489 station visits were conducted which included the collection of 361 water samples (excluding quality assurance samples) and 388 field chemistry reports (excluding in situ quality assurance samples and observations). One hundred and thirty-nine quality assurance laboratory samples were collected or created which included forty-seven replicate samples, forty-six split samples and forty-six trip blanks.

Twelve diel studies were completed for Part III. Remaining studies will be completed during the 2016 permit term. Seasonally ephemeral conditions prohibited diel studies at the remaining six stations scheduled for 2015. Attempts will be made in 2016 to collect the information.

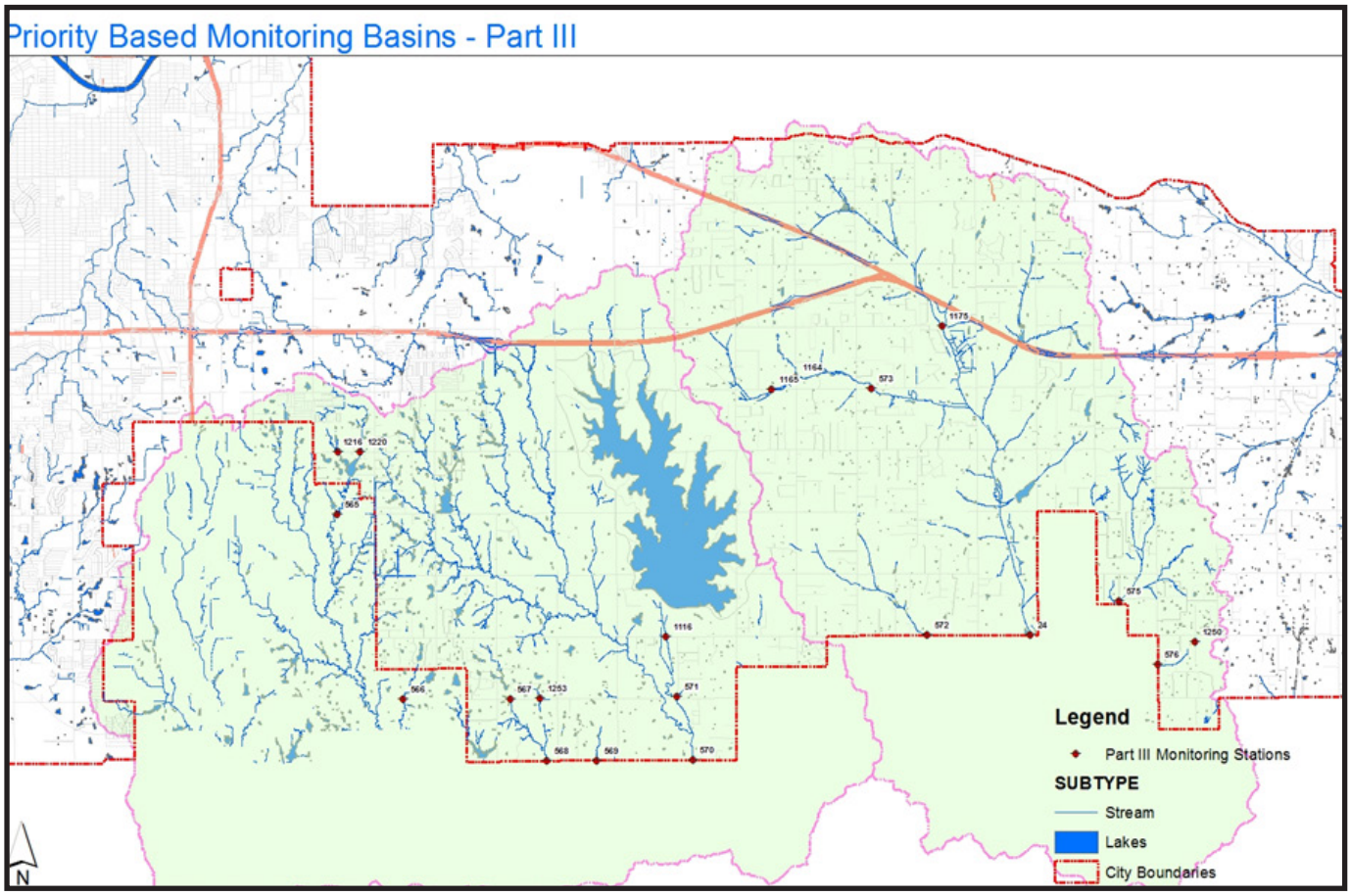
SWQ staff perform monitoring activities

Fish collections were scheduled for 8 stations

Triclosan and caffeine samples were collected at selected monitoring stations within the Hog Creek (site 24, 574 and 1175), Unnamed Tributary to the North Fork of the Little River (site 565, 1216 and 1220), Elm Creek (site 570), East Elm Creek (site 571 and 1116), West Branch of Hog Creek (site 573 and 1164), Unnamed Tributary to Hog Creek (site 576) and Unnamed Tributary to the North Fork of the Little River (site 566).

Fish collections were scheduled at eight stations. Collections were completed at seven stations. The remaining station was ephemeral (site 1250).

At the closure of the 2015 permit term, the water sampling component of Part III was 100% complete.



Number of Events	Month	Site Group	Year	Sampling Date
1	August	Year 3	2014	August 18-20, 2014
2	September	Year 3	2014	September 1-3, 2014
3	September-October	Year 3	2014	September 1-October 3, 2014
4	October	Year 3	2014	October 13-15, 2014
5	October	Year 3	2014	October 27-29, 2014
6	November	Year 3	2014	November 10-12, 2014
7	November	Year 3	2014	November 24-26, 2014
8	December	Year 3	2014	December 8-10, 2014
9	December	Year 3	2014	December 22-23, 2014
10	January	Year 3	2015	January 5-7, 2015
11	January	Year 3	2015	January 19-21, 2015
12	February	Year 3	2015	February 2-4, 2015
13	February	Year 3	2015	February 16-18, 2015
14	March	Year 3	2015	March 2-4, 2015
15	March	Year 3	2015	March 16-18, 2015
16	March - April	Year 3	2015	March 30-April 1, 2015
17	April	Year 3	2015	April 13-15, 2015
18	April	Year 3	2015	April 27-29, 2015
19	May	Year 3	2015	May 11-13, 2015
20	May	Year 3	2015	May 25-27, 2015
21	June	Year 3	2015	June 8-10, 2015
22	June	Year 3	2015	June 22-24, 2015
23	July	Year 3	2015	July 6-8, 2015
24	July	Year 3	2015	July 20-22, 2015
25	August	Year 3	2015	August 3-5, 2015
26	August	Year 3	2015	August 17-19, 2015
27	August-September	Year 3	2015	August 31-September 2, 2015
28	September	Year 3	2015	September 14-16, 2015
29	September	Year 3	2015	September 28-30, 2015
30	October	Year 3	2015	October 12-14, 2015

There were 19 monitoring locations selected in 4 sub-basins within the Canadian River watershed

Priority Monitoring Part IV - Water Quality Monitoring Summary - Nineteen monitoring locations were selected in four sub-basins within the Canadian River watershed and one within the North Canadian River watershed.

The first sampling events were conducted on October 12-14, 2015. Monitoring activities continued bi-monthly throughout the remainder of the permit year.

During the 2015 permit term, 114 station visits were conducted which included the collection of 102 water samples (excluding quality assurance samples) and 115 field chemistry reports (excluding in situ quality assurance samples and observations). Forty-two quality assurance laboratory samples were collected or created which included fourteen replicate samples, fourteen split samples and fourteen trip blanks.

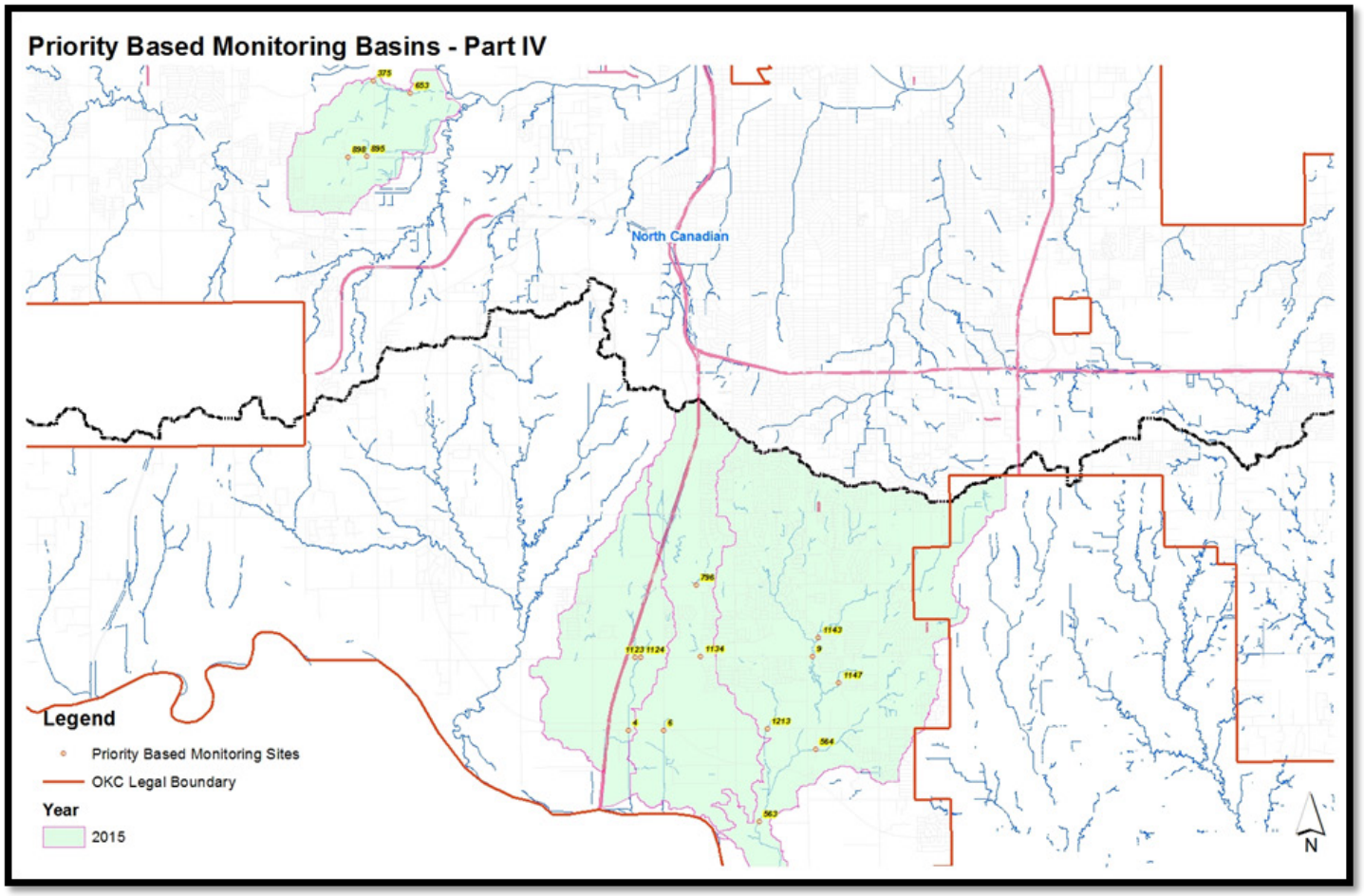
Seventeen diel studies are scheduled for Part IV. Studies will be conducted during the summer and fall of 2016.

Triclosan and caffeine samples were collected at selected monitoring stations within an Unnamed Tributary to the Canadian River (three stations), Tributary 2 of the Canadian River (three stations), Tributary 1 of the Canadian River (seven stations) and Unnamed Tributary to North Canadian River (four stations).

Four fish collections are scheduled for the summer of 2016.

At the closure of the 2015 permit term, the water sampling component of Part IV was 20% complete.

Month	Site Group	Year	Sampling Date
October	Year 4	2015	October 12-14, 2015
October	Year 4	2015	October 26-28, 2015
November	Year 4	2015	November 9-11, 2016
November	Year 4	2015	November 23-25, 2016
December	Year 4	2015	December 7-9, 2016
December	Year 4	2015	December 21-23, 2016
January	Year 4	2016	January 4-6, 2016
January	Year 4	2016	January 18-20, 2016
February	Year 4	2016	February 1-3, 2016
February	Year 4	2016	February 15-17, 2016
February - March	Year 4	2016	February 29-March 2, 2016
March	Year 4	2016	March 14-16, 2016
March	Year 4	2016	March 28-30, 2016
April	Year 4	2016	April 11-13, 2016
April	Year 4	2016	April 25-27, 2016
May	Year 4	2016	May 9-11, 2016
May	Year 4	2016	May 23-25, 2016
June	Year 4	2016	June 6-8, 2016
June	Year 4	2016	June 20-22, 2016
July	Year 4	2016	July 5-7, 2016
July	Year 4	2016	July 18-20, 2016
August	Year 4	2016	August 1-3, 2016
August	Year 4	2016	August 15-17, 2016
August	Year 4	2016	August 29-31, 2016
September	Year 4	2016	September 12-14, 2016
September	Year 4	2016	September 26-28, 2016
October	Year 4	2016	October 10-12, 2016
October	Year 4	2016	October 24-26, 2016
November	Year 4	2016	November 7-9, 2016
November	Year 4	2016	November 21-23, 2016



Illicit Discharge Detection and Elimination Program

Dry weather screening is a field monitoring technique used by the City to detect illicit discharges such as illegal connections, potable water line leaks, wastewater line leaks, illegal discharges and out of compliance discharges from construction activities, industrial operations and residential land uses.

Part III.A.14 of the OKC MS4 Permit requires the completion of 100% of the 554 Dry Weather Field Screening stations three times each permit term. Year 1 and 5, 100% of the sites will be monitored. Year 2, 3 and 4 roughly 1/3 of the sites will be monitored.

Screening results identified as illicit non-storm water discharges were investigated and appropriate actions taken.

A total of 219 station visits were completed from June 23, 2015 through December 31, 2015. This accounts for roughly a 98% completion rate of the 2015 testing requirements. Verification of field paperwork indicated that 15 stations have pending follow-up investigations to determine the cause of the elevated field testing results. Those stations will be visited early 2016.

Storm Water Quality Management identified fifty-seven observations or field chemistry results which warranted further investigation. Forty-two follow-up investigations were accomplished and remedial actions sought by the responsible parties, when applicable. The remaining fifteen investigations are scheduled for completion during the 2016 permit term.

Staff performs dry weather screening

Dry Weather Monitoring Schedule 2012 - 2016	
Permit Number	Number of Locations
2012	554
2013	143
2014	188
2015	223
2016	554

A total of 219 site visits were completed in 2015

2015 field testing results indicated variability with regard to parameters which require additional follow-up. Total chlorine accounted for the highest percentage (43.9%) followed by pH (12.3%) and detergents (12.3%). Multiple parameter detections were observed at several stations and included pH & detergents (12.3%), chlorine & detergents (5.3%) and chlorine & pH (5.3%).

If detection was made, the pollution was tracked to the source. All field documentation was then transferred to a Storm Water Quality Management Dry Weather Report and filed in the Storm Water Quality Management files.

2015 Statistics		
Month	Number of Site Visits	% of Total
June	22	10%
July	55	25%
August	71	32%
September	32	15%
October	33	15%
November	4	2%
December	2	1%
Total Site Records	**219**	**100.0%**
Four stations were not completed due to construction or changes in the collection system.		

Dry weather sampling

Optical brightner sampling

Treating for mosquitoes

Additional testing was completed in February 2015 to finalize the 2014 listed stations or required follow-up investigations. Nine stations required follow-up investigation and seven stations required full program testing.

Storm Water Quality Division continued to utilize the CUES steerable storm drain camera system to identify sources of pollutants, verify structural defects, confirm repairs and isolate blockages within the storm drainage network. The camera system is housed in an enclosed cargo trailer which can be used as a stand-alone unit or towed behind a vehicle to locations throughout the City. Video inspections are recorded onto a DVD for documentation purposes. A standardized field form is completed for each video inspection, which includes investigation location information, conduit size and configuration, time, defects or other problems encountered. Specific distances of items noted are recorded for any necessary follow-up actions.

Fifty-seven field chemistry results warranted further investigation

2015 Discharge Investigation Sites	
Major Basin	Number of Pollution Investigations
Deep Fork River	6
Deer Creek	2
North Canadian River	49
Canadian River (South)	0
Total	**57**

Floatable debris net

Sampling for mosquitoes

Watershed sampling

CUES camera trailer

During 2015, Storm Water Quality Management performed seventy camera operations. 20,860 feet (3.95 miles) of storm drains were inspected during these investigations. The transporter and camera unit assisted in the discovery of structural problems, sediment accumulations, commercial illicit connections, root intrusion, mosquito problems and illegal dumping.

In addition to Storm Water Quality's camera operations, the Streets and Drainage Maintenance Division of the Public Works Department provides camera inspection services. Crews' tasks generally include isolating structural problems, responding to poor drainage or inspecting replaced or reconditioned storm drainage structures. The camera system was under maintenance for the majority of the permit term which is directly related to the low number of video inspections performed. Two camera inspections were completed during the permit term which totaled 300 feet (0.06 miles).

Streets and Drainage Maintenance and the Storm Water Quality Division performed a combined total of 72 closed circuit storm drain camera inspections during the 2015 permit term which accounted for 21,160 feet (4.01 miles) of assessed structural assets.

2015 Detection Statistics		
Parameter	Number of Sites	% of Follow-up
pH	9	16%
Total Chlorine	25	44%
Detergents	**7**	**12%**
Phenol	**1**	**2%**
pH & Detergents	**7**	**12%**
Chlorine & Detergents	**3**	**5%**
Chlorine & Copper	**1**	**2%**
Chlorine & pH	**3**	**5%**
Chlorine, pH & Detergents	**1**	**2%**
Totals	**57**	**100%**

Storm drain camera systems control room

SWQ Storm Drain Camera Operations 2007-2014		
Permit Year	Number of Operations	Miles Observed
2007	3	0.22
2008	33	2.22
2009	33	1.36
2010	43	2.71
2011	**25**	**1.12**
2012	**31**	**3.21**
2013	**53**	**3.62**
2014	**52**	**2.42**
2015	**70**	**3.95**

Oklahoma River

Supporting Permit Conditions, Monitoring Programs and Documents

Interjurisdictional Agreements - The City has agreed to supplement its permit application to allow the Oklahoma Department of Transportation (ODOT) and the Oklahoma Turnpike Authority (OTA) to be co-applicants and co-permittees through a Memorandum of Understanding (MOU).

Budget - The storm water drainage utility was established by city council on June 13, 1995 to address federal mandates governing National Pollution Discharge Elimination System (NPDES) programs, and is responsible for planning and implementing strategies for improving the quality of storm and other runoff waters. The utility is an enterprise with operating revenues generated from a drainage fee. Fees are billed monthly, along with water, wastewater and solid waste fees.

Revenue for 2015	
Fine/Court Cost	$603
Permitting	$117,690
Reimbursements	$255,760
Drainage Utility Fee	$16,850,160

Revenues	Actual FY 14	Adopted FY 15	Adopted FY 16
Drainage Fee	$15,982,836	$16,384,342	$16,820,685
Interest Income	46,067	39,189	53,180
ODOT Reimbursements	255,766	255,766	255,766
Permits	115,825	114,312	117,384
Other	311,718	44,071	59,441
Fund Balance	0	3,147,672	3,342,746
Reserve for Outstanding Encumbrances	0	1,630,146	398,734
Storm Water Drainage Utility Fund	**$16,712,212**	**$21,624,498**	**$21,059,936**

The one Enterprise Fund that is not supported by a trust is the Storm Water Drainage Utility. All revenue for Storm Water Drainage activities comes from a fee on all water utility bills based on the size of the water meter. Revenues are expected to show growth of 1.0% over expected FY15 totals and are based on an increase in the number of utility customers. The Storm Water Drainage Utility Fund is the only Enterprise Fund to also have a capital component in the non-operating funds section.

Storm Water Quality Positions and Budget

	FY 14		FY 15		FY 16	
Program	Adopted Positions	Actual Expenses	Adopted Positions	Actual Expenses	Adopted Positions	Actual Expenses
Environmental Water Quality	5.10	$591,784	6.10	$844,846	6.10	$814,974
Household Hazardous Waste	7.10	882,381	7.10	955,270	7.10	978,825
Public Outreach	0.00	0	1.00	130,433	1.00	126,243
Storm Water Permitting	14.80	$1,254,890	13.80	1,368,036	13.80	1,336,463
Line of Business Total	27.00	$2,729,055	28.00	$3,298,585	28.00	$3,256,505

Storm Water Quality Management Divsion Staff

Administration

Raymond Melton, Environmental Protection Manager
Jessica Gravlin, Administrative Coordinator
Amanda Blalack, Office Coordinator
Vacant, Professional Technician
Vacant, Professional Technician
Andrea Shelton, Community Relations Coordinator

Construction

David Phillips, Environmental Unit Supervisor
Scott Cox, Environmental Technician
Bryan Jones, Environmental Technician
Jimmy Stotts, Environmental Technician
Donna Weiche, Environmental Technician
Bill Whitaker, Environmental Technician

Environmental

Derek Johnson, Environmental Unit Supervisor
Justin Rolen, Environmental Unit Specialist
Josh Adams, Environmental Technician
Dawson McNeill, Environmental Technician
Buck Pearson, Environmental Technician
Vacant, Environmental Technician
Shantal Craig, Professional Technician
Martin Tolbert, Professional Technician
Vacant, Professional Technician

Household Hazardous Waste

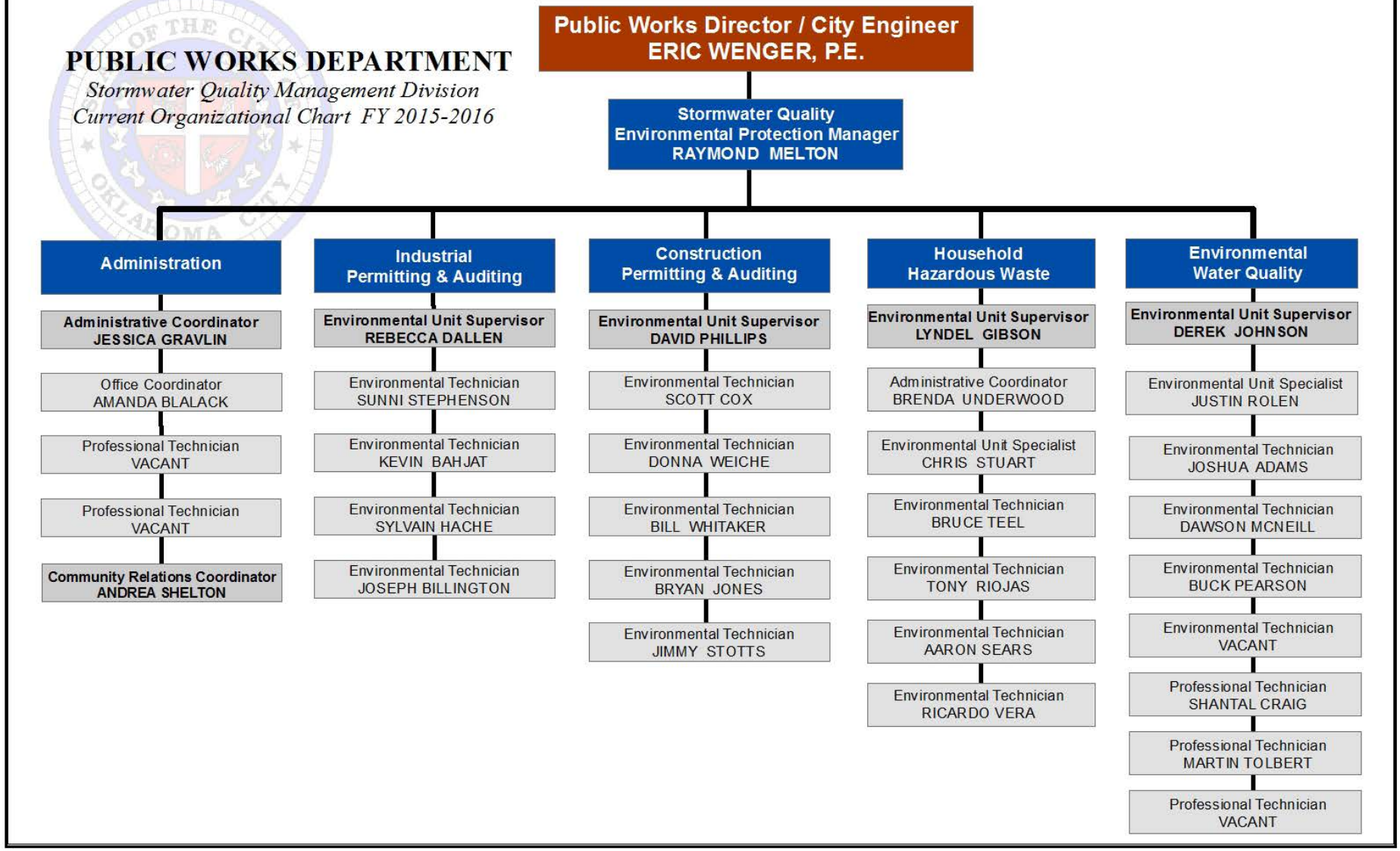
Lyndel Gibson, Environmental Unit Supervisor
Brenda Underwood, Administrative Coordinator
Chris Stuart, Environmental Specialist
Bruce Teel, Environmental Technician
Tony Riojas, Environmental Technician
Aaron Sears, Environmental Technician
Ricky Vera, Environmental Technician

Industrial

Rebecca Dallen, Environmental Unit Supervisor
Sunni Stephenson, Environmental Technician
Kevin Bahjat, Environmental Technician
Sylvain Hache, Environmental Technician
Joseph Billington, Environmental Technician

PUBLIC WORKS DEPARTMENT

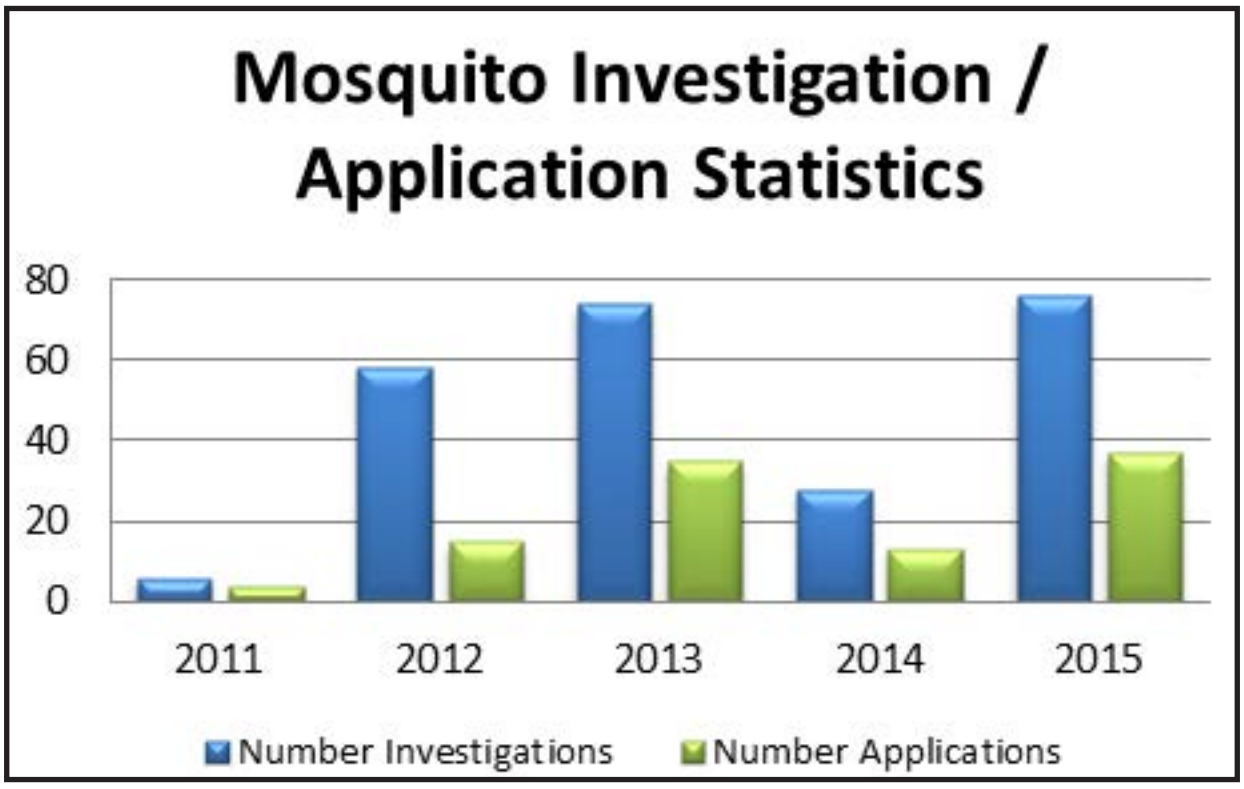
Stormwater Quality Management Division
Current Organizational Chart FY 2015-2016



Mosquito habitat investigation

Mosquito Larvicide Application Program - Oklahoma City has worked with the Oklahoma City / County Health Department (OCCHD) for thirteen (13) years to monitor and control mosquito populations within Oklahoma City. Planning for the mosquito season began prior to the spring warming and rainfall events.

SWQ used larvicides to control temporary and permanent mosquito nursery pools. Altosid XR (EPA Registration Number 2724-421), is used in transitory or perennially inundated areas that support mosquito egg laying, larvae growth and emergence. The pesticide's active ingredient is (s)-Methoprene (2.1% dry weight basis) which functions as a larval growth inhibitor. This larval growth inhibitor specifically stops the mosquito life cycle in larval stages and can be effective up to 150 days in the application area.



Altosid Pro-G (EPA Registration Number 2724-451) was added as an alternative to Altosid XR. As with Altosid XR, (s)-Methoprene is the active ingredient. However, Altosid Pro-G is effective for a shorter duration of time (~30 days versus ~150). A granular formula was preferred for those pools which required smaller applications due to water depth, proximity to larger non-infested waters or waters which are transient and more permanent control was unnecessary.

Mosquito monitoring

Mosquito Dunks (EPA Registration Number 6218-47) was added as an alternative treatment to the (s)-Methoprene based products. Mosquito dunks are formulated with Bacillus thuringiensis subspecies israelensis (BMP144) solids, spores and insecticidal toxins. This product provides an alternative for smaller sources of mosquitos such as temporary pools, containers or other vessels which may contain mosquito larvae. The effective period is approximately 30 days.

Trained personnel are notified of mosquito breeding areas through direct communication with the public in the field, citizen notification through Oklahoma City's Action Center, notification through the SWQ office or yearly visits to known problematic locations. Each location is visually assessed using a dipper to determine mosquito larvae presence. If the area has the proper conditions and larvae are present, an application will be conducted. Technicians will record the number of "dips" or observations conducted, the estimated number of mosquito larvae observed, location of the application area, the calculated surface area of the treatment target, date and time of the application and the quantity of pesticide applied.

All site visits or applications are recorded in a Mosquito Application field book, maintained within the SWQ Pollution Investigation database and the SWQ Geographic Information System files.

Mosquito habitat

During the 2015 permit term, SWQ personnel conducted seventy-six (76) mosquito investigations, which resulted in thirty-seven (37) applications and a surface treatment area of approximately 24,902 sq. feet. The application rate versus the investigation rate was 48.7 %.

Oklahoma City's Mosquito Program is included within the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit Notice of Intent (US EPA Tracking Number OKG87A006) submitted to the United States Environmental Protection Agency (EPA). The permit coverage began for Oklahoma City's Management Area on March 4, 2012. On December 20, 2012, the Oklahoma Department of Food and Forestry (ODAFF) received authorization from the EPA to administer a partial NPDES Program. Among other responsibilities, the EPA has authorized the ODAFF to regulate permits and associated discharges related to application of pesticides to Waters of the United States.

2015 Mosquito Larvicide Application Statistics	
Parameter	Number
Number of Mosquito Larvae Detected	1,587
Number of Samples Taken for Observation	1,163
Number of Investigations	76
Number of Applications	37
Total Surface Area Treated (sq. ft.)	24,902

In early 2013, efforts were initiated between Oklahoma City and OCCHD to begin an adult mosquito surveillance program. This program was continued during the 2015 permit term. Oklahoma City staff provided secure mosquito monitoring stations, personnel and maintenance of the surveillance equipment. OCCHD provided the adult mosquito traps, taxonomic identification and testing for the presence of the West Nile Virus (WNV). Six monitoring stations were assessed throughout the mosquito season accounting for 132 field visits. Technician's collected 9,726 adult mosquitos of which approximately 74% (7,235) were tested for the presence of the WNV. Nine (9) test results were positive for the presence of the WNV. Monitoring results are currently being used to understand local mosquito population densities and dynamics identify the presence of the WNV in mosquito populations and identify key mosquito species which show the presence of WNV. The program is expected to continue during the 2016 mosquito season.

Mosquito habitat

Auto sampling equipment

Other Monitoring Programs - General Overview - SWQ continued several special water sampling programs during the 2015 permit term including the Special Project Roxboro Addition. This project originally included the collection of field water quality information at three monitoring stations using a LaMotte Storm Drain Kit at a collection frequency of two visits each month. Sampling visit frequency was reduced to monthly in 2014. The Roxboro Addition (project area) is located between Hefner and Rockwell near NW 116th Street in a single family medium density residential area. The program was initiated by citizen request and continues to date on a monthly basis. Field parameters include estimated or measured discharge, total chlorine, pH, water temperature, phenol, copper and detergents. During the 2015 permit term thirty-nine site visits were conducted for the Special Project Roxboro Addition.

To generate the information needed to assess the levels of fecal contamination indicators in the Oklahoma and North Canadian River, SWQ initiated a three part bacteria monitoring program. The program includes dry weather, wet weather and fixed interval sampling efforts with focus on the bacterial parameters *E. coli* and enterococci. Other field parameters include site observations, calculation of discharge and measurements of turbidity. Data were reported for two monitoring stations during 2015. One hundred and fifteen sampling events were recorded during the permit year. An additional thirty-eight samples were collected or created (trip blanks/ equipment blanks), analyzed and reported as part of the project quality assurance efforts. Quality Assurance samples included ten equipment blanks, eleven trip blanks, twelve sample splits and five sample replicates.

In efforts to foster safe water recreation, Oklahoma City allows swimming in natural waters on a permit basis. These revocable permits have specific language detailing indicator bacteria and blue-green algae counts which must not be exceeded to hold an event which includes primary body contact recreation. Seven sampling events were conducted in support of permitted swimming activities. Samples were collected for blue-green algae and/or *E. coli* for a special diving administrative revocable permit in April, the Redman Triathlon at Lake Hefner in September and the Holiday Boat Parade at the Oklahoma River in December.

Seven sampling events conducted in support of permitted swimming activities

In addition to the traditional Illicit Discharge Detection and Elimination (IDDE) program, SWQ also conducts a complimentary program to detect optical brighteners in surface waters and storm drainage networks. These efforts are often paired with the IDDE program monitoring stations and run in tandem as a subprogram to the IDDE efforts. During the 2015 permit term, SWQ scheduled the testing of 129 optical brightener monitoring stations. 118 optical brightener stations were tested, representing 91% completion. No detections were made during the permit year. Optical brightener is sensitive to photo degradation in a relatively short period of time. To improve the program's detection capabilities, optical brightener devices are placed in high densities and in relative close proximity to each other within a sub-basin study area.

Floatable debris collection nets

OKC began a new program in 2015 to investigate the pollutant removal efficiency of OKC's catch basin inserts. Catch basin inserts are storm water quality devices installed underneath storm-drain grates to remove floatable debris and coarse particulates such as sediment, leaves, and grass trimmings. While catch basin inserts can be effective for removing large floatable debris, little research has been done on their ability to remove waterborne pollutants. To assist with ongoing watershed modeling and to gain a better understanding of catch basin inserts as a BMP, OKC began collecting samples from several inserts throughout the city. This program will enable a comparison of pollutant removal efficiencies between different land uses (e.g., residential vs. commercial), examine seasonal variations in pollutant removal (e.g., the impact of leaves on nutrient loads), or determine any impacts from different land management practices (e.g., frequency of fertilizer applications).

Samples are collected from two sites regularly (twice per month) for at least 12 months to allow for a seasonal comparison of nutrient removal. All other sites will be selected randomly and samples will be collected at least once per year. As of the end of this permit year, seven samples were collected. Samples were laboratory-tested for total nitrogen (TN), total Kjeldahl nitrogen (TKN), total phosphorus (TP), total nitrogen as nitrite/nitrate (TN-NO2/NO3), and total solids for dry weight. Limited data is currently available for this permit year, OKC anticipates that a more detailed report with preliminary data analysis will be developed for the next permit year.

Permit Year	Number of OB Units Deployed	Number of OB Detections	Percentage Detection
2009	161	9	5.6%
2010	262	14	5.3%
2011	544	6	1.1%
2012	547	27	4.9%
2013	123	2	1.6%
2014	156	4	2.6% (1.3%)
2015	149	0	0.0%

*129 stations were scheduled for the 2015 permit term. Percent detection is based on all stations scheduled, monitored and reported for PY2015 (some of which were completed during the 2016 permit term). Some stations were not completed due to construction, changes to the storm drains or other reasons.

Date	Site Number	TN (mg/kg)	TKN (mg/kg)	TP (mg/kg)	TN-NO2/NO3 (mg/kg)	Total Solids for Dry Wt.
6/17/2015	1478	11100	11100	769	0.413	32%
10/23/2015	733	295	295	296	0.113	89%
10/23/2015	1402	1030.513	1030	206	0.513	99%
12/23/2015	1402	1050	1050	797	0.174	76%
12/23/2015	1462	751	751	476	0.2755	48%
12/23/2015	1464	586	586	547	0.2245	59%
12/23/2015	1478	9530	9530	1270	0.3435	39%

Note: Red text indicates a laboratory QA violation. Green text indicates laboratory results less than reporting limits and is reported as: Reporting limit * 0.5.

Memorial Park Project

Memorial Park Project - The City of Oklahoma City Parks and Recreation Department recently completed a major two-million dollar renovation of Memorial Park at NW 35th and Classen Blvd. One of the key additions to this 17-acre park was the expansion of an existing asphalt parking area on NW 36th Street. Since the park is located in an older urbanized area of the City, the stormwater system in this area is limited to increased drainage from new pervious surfaces. To address this concern of increased drainage and discharging pollutants from the parking lot into the stormwater system, Parks and Recreation Department Landscape Architects designed a "green" parking lot utilizing pervious paving, infiltration trenches, and two small settling pools. This was a pilot project and the first pervious paving parking lot in a park. The run-off generated by the new parking lot percolates through the porous gaps in the pavers and migrates to a perforated drain pipe that transmits the water to the two holding pools adjacent to the parking lot. In addition to pervious paving, there are infiltration trenches in the planting islands intercepting surface drainage from the heavy duty asphalt drives. Plants that are sustainable to this environment have been selected for these islands. Cost of the drainage system, plant mix, plants, rock, underdrain, etc. was approximately $90,000. The plan is to further enhance the two grassy pools with native vegetation as a "water garden."

Kitchen Lake Park Project - The City of Oklahoma City Parks and Recreation Department completed a $650,000 project in a new park called Kitchen Lake Park. Located at SE 119th and Sooner Road, the park is adjacent to a 60-acre lake. The project was basically a new ADA accessible fishing pier, picnic tables, and paved parking lot. Due to the steep slopes and erosive soils the landscape architects of the Parks Department designed a "water garden" and "ephemeral pools" to handle the stormwater runoff created by the new asphalt parking and access drive. The new pervious surfacing amounted to approximately 30,000 square feet. A circular parking area with a 60-foot diameter rain garden in the center provides adequate capacity to capture the water generated from the paving and ADA sidewalks. The center contains sustainable plant materials that can withstand temporary ponding or drier conditions during summer months. The elevation of the center drain is raised to create the holding capacity to slow down the water to permeate the plant mix provided as the growing medium. During heavier rains the water flows over the edge of the drain and into 2 temporary ephemeral pools downstream. These streams hold the water and allow pollutants or sedimentation to collect before it reaches the lakes thus filtering and cleaning the water to minimize turbidity. These pools also provide small valuable habitat for birds, butterflies and many beneficial insects. In an effort to provide a rural setting with sustainable plant materials, the vegetative cover that would normally be sodded with bermuda was hydromulched with buffalo grass and/or a combination of wildflowers and grasses. An organic erosion control mesh was laid on the mulched areas to protect the seeds until they could create a stand of grasses. The seed came up in good shape and provides a low maintenance ground cover that not only is aesthetically pleasing and appropriate for the location but provides a more low impact solution to stormwater runoff and improving the water quality of Kitchen Lake.

The circular water garden is approximately 2,800 square feet, the two pools are around 315 square each. Cost for installation is approximately $80,000 for plants, drainage, soil mix, rock, grading, etc.

This project was constructed with General Obligation Bond funds and was the initial "water garden" utilized to address a more sustainable solution to handling runoff.

Rain garden in Lake Thunderbird Watershed

MS4 Specific Requirements

Program Component - Part II.B.2 of the Oklahoma City MS4 Permit requires certain initiatives to incorporate, plan and implement to reduce pollutants discharged into waters of the State. The following sections provide the requirements and annual program accomplishments for the applicable Total Maximum Daily Loads in Oklahoma City.

Part II.B.2 Total Maximum Daily Load (TMDL) Allocations

1. Discharge of a pollutant into any water for which a TMDL or watershed plan in lieu of a TMDL for that pollutant has been either established or approved by the DEQ or EPA is prohibited, unless your discharge is consistent with that TMDL or watershed plan. You must incorporate any limitations, conditions, monitoring and other requirements applicable to your discharges into your SWMP to ensure that the waste load allocation, load allocation and/or the TMDLs associated implementation plan will be met within any timeframes established in the TMDL or watershed plan. You must adopt any WLAs assigned to your discharges specified in the TMDL as measurable goals within the permit.

2. If a TMDL or watershed plan in lieu of a TMDL is approved for any water body into which you discharge after the date that your permit becomes effective, you must incorporate any limitations, conditions, and requirements applicable to your discharges into your SWMP to ensure that the waste load allocation, load allocation and/or the TMDLs associated implementation plan will be met within any timeframes established in the TMDL or watershed plan. Monitoring and reporting of the discharges may also be required as appropriate to ensure compliance with the TMDL or watershed plan. You must adopt any WLAs assigned to your discharges specified in the TMDL as measurable goals within the permit.

Lake Thunderbird Report for Nutrient, Turbidity, and Dissolved Oxygen TMDL

- November 20, 2013, OKC notified by the Oklahoma Department of Environmental Quality of EPA approval of the Lake Thunderbird.
- Requirements included incorporation of the TMDL WLA into the City's Storm Water Management Plan; develop a TMDL Compliance Plan, and a comprehensive Monitoring Plan.

Bioretention cell retrofit

2015 TMDL Milestones

- TMDL Compliance Plan and TMDL Monitoring Plan
  - Submitted draft Compliance Plan and Monitoring Plan to ODEQ on November 12, 2015.
- Monitoring Summary
  - Research and cost analysis of passive and automatic sampling equipment.
  - Monitoring schedules developed. Proposed monitoring start, October 2016.
- Training
  -No specific training was provided to internal staff or the general public during the permit review period.
- Non-Structural BMP Load Reductions
  -Ongoing modeling of non-structural BMPs.
  -Existing Non-Structural Pollutant Removals (calculated using the Watershed Treatment Model)
- Structural BMP Load Reductions
  -Ongoing modeling of structural BMPs (Calculated using the Watershed Treatment Model)

Load Reduction from Existing Practices (lbs. / year)			
	N. (lbs./year)	P. (lbs./year)	TSS (lbs./year)
Turf Management - Surface	0	0	0
Pet Waste Education	0	0	0
Erosion and Sediment Control	37	7	24,916
Street Sweeping	9	1	598
Street Sweeping - Sanding	0	0	0
Riparian Buffers	0	0	0
Catch Basin Cleanouts	0	0	0
Marina Pumpouts	0	0	0
Total Reduction	46	8	25,514

Load Reduction from Existing Structural Practices (lbs. / year)				
Location	Drainage Size (Acres)	N. (lbs./year)	P. (lbs./year)	TSS (lbs./year)
Detention - Dry Bottom Water Quantity Pond Near SE 149th and Santa Fe	68.6	25	11	1,476
Wet Bottom Quantity Detention Near SE 89th and Bryant	68.5	338	108	5,435
Total Reduction		363	119	6,911

- Meetings and other Collaborative Efforts

-March 27, 2015—201 West Gray, Norman—Stakeholder Meeting

-April 1, 2015—420 W Main, OKC—OKC Management Update

-April 9, 2015—707 N Robinson—Questions for ODEQ on OKC plan

-July 8, 2015—ODEQ deadline reminder letter #1

-October 13, 2015—ODEQ deadline reminder letter #2

-November 12, 2015—TMDL Compliance and Monitoring Plans submitted to ODEQ

-January 8, 2015—ODEQ formal comments received by OKC regarding the OKC Lake Thunderbird Compliance and Monitoring Plans.

The City of
OKLAHOMA CITY
DEPARTMENT OF PUBLIC WORKS

CERTIFICATION STATEMENT

NPDES Permit No. OKS000101
Review of Storm Water Annual Report

I certify under penalty 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 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.

Eric J. Wenger, P.E., Director
Public Works/City Engineer

3/23/15
Date

March 11, 2016

Eric J. Wenger, P.E., Director
Public Works/ City Engineer
City of Oklahoma City
420 West Main Street, 7th Floor
Oklahoma City, OK 73102

Attention: Raymond Melton

Dear Mr. Melton:

Enclosed is the Oklahoma Department of Transportation portion of the Fiscal Year 2015 Annual Report to be submitted to the Oklahoma Department of Environmental Quality in accordance with the Oklahoma City Municipal Separate Storm Sewer System (MS4) Permit Number OKS000101. This report covers the period from January 1, 2015 through December 31, 2015.

Please provide this office with one copy of the Annual Report as it is submitted. If you have any questions or require further information, please contact Ms. Michele Dolan at (405)521-6771.

Sincerely,

Casey Shell
Chief Engineer

Enclosure

Oklahoma Department of Transportation

Annual Report
For
January 1, 2015 through December 31, 2015

CERTIFICATION STATEMENT

NPDES Permit No. OKS000101
Review of Storm Water Annual Report

I certify under penalty 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.

3/9/16

Casey Shell
Chief Engineer

Date

FISCAL YEAR
2015
ANNUAL REPORT
BY THE
OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT)
ON
OKLAHOMA CITY MS4 PERMIT # OKS000101

March 11, 2015

Status

The Oklahoma Department of Transportation (ODOT) has implemented and is in compliance with the Storm Water Management Plan. The following items demonstrate activities undertaken for this annual report period.

Expenditures

As part of ODOT's Storm Water Management Program, the Oklahoma City metro area highway system shoulders are swept to remove sediment and debris. This sweeping program for the annual report period covered three thousand, seven hundred lane miles at a cost of approximately $621,500. A private contractor picks up litter from the highways in the city at an annual cost of over $97,000. The estimated total expenditure for ODOT in anti-litter efforts statewide is approximately $4,000,000.

Erosion and Sediment Control

ODOT's "Storm Water Management Guidelines for Design and Construction Activities" is used by ODOT design, construction and maintenance personnel, consulting engineers and contractors to select, design and maintain appropriate erosion control measures for our construction and maintenance activities. Currently, ODOT is working with a consultant to create manuals for Design, Implementation and Inspection of erosion and sediment control devices for construction projects. An internal Erosion and Sediment Control task force was formed in January 2003 to improve and standardize best management practices for ODOT and entities acting on their behalf.

The Department formed four Storm Water Advisory Teams (SWAT) for the development of Design, Construction, Maintenance and Public Education/ Public Involvement Best Management

Practices for the agency in 2009. Currently, these teams are in the process of developing and conducting training and materials for educating ODOT personnel on Storm Water regulations.

ODOT Environmental staff has conducted thirty construction site inspections on road projects across the state in FY15. Any project with compliance issues was given fourteen days to remedy prior to a second inspection. These inspections will be ongoing for the foreseeable future. The goal is to inspect/ educate all road construction contractors that perform earth work on at least one project with every ODOT construction office in the state.

ODOT adopted a non-compliance assessment specification for construction contractors. The specification gives ODOT a mechanism to assess per day monetary fees for failure to comply with effective and timely measures, as requested by the weekly construction inspections.

Phase II MS4 Program

As of February 2005, ODOT was required to obtain a Phase II MS4 permit from DEQ. During this process, ODOT has been reviewing all aspects of our operations to comply with these additional requirements. ODOT has hired a consultant to advise the agency on the six Minimum Control Measures; Public Education and Outreach, Public Participation and Involvement, Illicit Discharge Detection and Elimination, Construction, Post Construction and Good Housekeeping / Pollution Prevention programs. ODOT has a proposed Combined Phase I and Phase II application that is currently waiting to be reviewed by DEQ.

Oklahoma Department of Environmental Quality personnel conducted a review of the ODOT Phase II MS4 Program on November 13th – 16th, 2012. The purpose of the review was to evaluate the current status of the ODOT Phase II MS4 program. The assessment consisted of a records review of ODOT's Storm Water Management Plan and site inspections of ODOT maintenance yards. Inspections were performed at the Cherokee County Maintenance Yard in Tahlequah, the Comanche County Maintenance Yard in Lawton, the Rogers County Maintenance Yard in Claremore and the Division One Headquarters in Muskogee. Overall, the maintenance yards visited were in good condition and the pride superintendents take over their yards was noted by the ODEQ inspectors. Additional storm water-related training for maintenance crews and engineering staff was encouraged and will be scheduled in the coming year.

ODEQ personnel inspected the ODOT central office garage and the Oklahoma City maintenance yard in November 2014. Minor violations such as, dumpsters without lids, were noted by the inspectors but have since been corrected. There were no spills of reportable quantity for 2015.

Illicit Discharge Detection and Elimination Program (IDDE)

ODOT continues to conduct Outfall Mapping in the regulated areas of the State. This effort is being done by Consultants. This data (pictures, inspection results) is being built into ODOT's

Geographical Resource Intranet Portal system that contains multiple databases with many facets of highway information. A guidance document was developed to assist ODOT personnel in identifying and reporting an Illicit Discharge. It was distributed to all ODOT Maintenance staff. Discussion on tracking Highway Spills from accidents is ongoing between DEQ, ODOT Risk Managers, Maintenance personnel and the Highway Patrol.

Good Housekeeping / Pollution Prevention Plans (GHPPP)

ODOT has completed an inventory survey of facilities statewide to develop training on Good Housekeeping and Pollution Prevention. Funding for facility upgrades and/ or relocation is being pursued by the Agency. Construction was completed on a new maintenance facility in Roger Mills County in 2015. Construction began on new facilities in Atoka County, Jackson County and Kingfisher County in 2015 and is scheduled to be completed in 2016. Currently, each of the eight Field Divisions are evaluating location, condition and need to determine which County facility will be moved or rebuilt on site. These upgrades will further the Good Housekeeping /Pollution Prevention Minimum Control Measure by adding updated secondary containment devices and retention facilities. In addition, ODOT has developed a Good Housekeeping Pollution Prevention Plan Facility template. The templates are being completed for facilities in the regulated areas to satisfy DEQ requirements. Currently, all the facilities located in the regulated areas have been inspected for pollution prevention opportunities, procedures have been reviewed with their Maintenance Supervisors. GHPPP's and training are being developed.

ODOT has incorporated a "Clean Sweep" program at all of the facilities throughout the State. This program is intended to remove old materials that may be potential pollutants. This program is ongoing and is being conducted with the assistance of the Department of Central Services on the sale of the material that can be repurposed. This undertaking is being done for the Good Housekeeping/ Pollution Prevention MCM, as well as evaluating which facilities will require Spill Prevention, Control and Countermeasure (SPCC) plans. It has been determined that many facilities will not meet the required capacity for SPCC plans, after the Clean Sweep operation has been conducted.

Additionally, ODOT has hired a Consultant to map all the maintenance facilities in the regulated areas for possible water quality impacts, e.g., sensitive waters, aquatic resources of concern, endangered and threatened species. This information will be incorporated into the mapping database mentioned in the IDDE section.

Herbicide Application

The application of herbicides is performed by Oklahoma Department of Transportation employees. ODOT closely follows the procedures, rules, and regulations contained in the Oklahoma Pesticide Applicators Law. ODOT requires all its applicators to be licensed and are subject to the implementing regulations of this law. ODOT partners with the Oklahoma

Department of Agriculture to offer the Pesticide Applicators test required for a license during our annual workshops.

ODOT has a contract with the Oklahoma State University/ Oklahoma Cooperative Extension Service to provide annual herbicide applicator workshops. Fourteen continuing education workshops were held across the state in each of the eight field divisions. Approximately five hundred and seventy five people attended the workshops statewide, which includes seventy four employees from the Oklahoma City area. A large portion of this workshop covered the various issues concerning environmentally safe usage of herbicides. Calibration/ Equipment Assessment Workshops were held statewide in April 2015. Four Certification Workshops were held statewide with one hundred and eight attending. ODOT has scheduled the continuation of this training/certification for the coming year.

On October 31st, 2011, new EPA regulations were promulgated that brought Pesticide Application under the Clean Water Act, if applicable. ODOT has adopted a thirty foot buffer zone from all USGS "Blue Line" streams to meet EPA's Pesticide General Permit requirements. By using "terrestrial only" applications, ODOT will not be required to obtain Pesticide Application permits under the Clean Water Act. ODOT Environmental Programs Division attended the Field Division workshops, explained the buffer zone requirements, demonstrated how this process of shutting off the spray in the correct areas and the importance of complying with this regulation. An interactive, online map of Oklahoma USGS "Blue Line" streams was created by ODOT GIS personnel to assist applicators in identifying shut off areas for their prospective roadways.

Public Education/ Litter Program

ODOT has continued the statewide anti-litter campaign, "Oklahoma, Keep Our Land Grand". The litter hot-line (1-888-5-LITTER), is available to report littering anywhere across the state. Callers can report the offenders tag number. The people observed littering were sent a postcard requesting them to help "Keep Our Land Grand". Littering is against the law and offenders can be fined from $200 to $2000.

School-age children are invited annually to enter a poster contest, sponsored by ODOT; Oklahoma Department of Environmental Quality, Oklahoma State Department of Education, Keep Oklahoma Beautiful, Oklahoma Environmental Management Authority, Oklahoma Rural Water Association, Oklahoma Chapter of the Sierra Club, Solid Waste Institute of NE Oklahoma, Waste Research, Inc., Oklahoma Arts Council, Oklahoma Employees Credit Union, OGE Energy Corporation, Veolia Water, Oklahoma Tourism & Recreation Department (Oklahoma State Parks), Wal-Mart, AEP-Public Service Company of Oklahoma, Oklahoma Turnpike Authority and the Oklahoma Highway Safety Office. Nearly eleven thousand students, grade Kindergarten through 12th participated in 2015/2016 contest. The winning posters are printed for distribution to schools, businesses, and chambers of commerce. A quantity of thirty five thousand calendars, featuring the winning posters, will be printed and distributed statewide

to schools, libraries city, county, state and federal offices. One of the twelve winning posters will be featured on fourteen thousand color reprints distributed for promotional display purposes to spread the anti-litter message to Oklahoma citizens of all ages.

The 23rd Annual State poster contest winners were honored at an April awards luncheon at ODOT's office in Oklahoma City. ODOT Deputy Director Tim Gatz welcomed attendees to the gathering and talked about the importance of litter abatement. OKC Beautiful put on an interactive skit entitled "Mother Earth" about litter and recycling. Guests were also treated to a luncheon catered by Oklahoma's Head Country BBQ. Each state poster winner received a monetary award of $250, $150 or $100 for first, second or third place. Winners also received a mounted reprint of their poster, placemats and t-shirts bearing their design. The twelve winners were then presented to the Oklahoma State House of Representatives at the Capitol. Each of the 12 students had the opportunity to get their photos taken with their respective representative.

As a component of ODOT's continuing education efforts, monthly Spotlight on Storm Water email bulletins began being developed and distributed in August 2013. The bulletins can be discussed at safety meetings, posted on bulletin boards or at the construction site field offices. They are intended to inform ODOT personnel about common problem areas on the construction site, new regulations and also highlight examples of effective erosion control.

Adopt-a-Highway/ TRASH-OFF

ODOT'S anti-litter efforts are still on-going and include two hundred forty four separate "Adopt-a-Highway" groups who remove litter from their two mile section of state highways at an interval of four times a year, and the "TRASH-OFF", an annual volunteer spring roadside cleaning sponsored by ODOT. Oklahoma City has twenty five "Adopt-a-Highway" groups covering fifty miles at a minimum of four times a year.

The Twenty-seventh Annual TRASH-OFF was the signature event of the Great American Cleanup (GAC) Oklahoma. This year's GAC took place from March 1 through May 31, 2015 and resulted in 3,351,263 pounds of litter and debris collected from Oklahoma roadsides and public areas by 53,058 volunteers and participants. This saved taxpayers an estimated 5.1 million dollars in clean-up costs. In addition, Keep Oklahoma Beautiful sponsors a banquet in the fall where awards are given to participants for "Best First Effort" and "Best Overall Effort".

ODOT is a member of the Central Oklahoma Storm Water Alliance (COWSA.) ODOT created a Storm Water contact link to the Website to receive questions or concerns regarding our processes and/or construction projects.

Wildflowers

Wildflower planting was ODOT's first landscaping program which started in 1976, but went into full scale planting in 1987. There are more than two thousand, two hundred acres in five hundred

eighty six sites planted statewide. The Oklahoma Legislature passed a bill in May 2006 creating a new Oklahoma wildflower car tag. Every wildflower tag will donate twenty dollars toward the planting of wildflowers on Oklahoma roadsides.

Citizen donations of $280,086 have purchased wildflower seed for planting along highways during the last 24 years. To date, ODOT has planted approximately two thousand three hundred acres on roadside sites statewide.

Three drill seeders, specifically designed for wildflower seed, are used by ODOT for planting on highway roadsides. These drills are available for use by Oklahoma communities and organizations.

Collection and Recycling

ODOT's Oklahoma City Maintenance personnel recycled approximately one hundred gallons of oil this past year. The oil is picked up by a private contractor six times a year. Approximately, 4,768 tires were recycled in 2015.

Mowing

ODOT's maintenance activities are being performed by private contractors that mow just over forty seven hundred acres per year in the Oklahoma City metropolitan area. This is done five times a year at a cost of approximately $974,000.

March 25, 2016

Eric J. Wenger, P.E.
Director Public Works/City Engineer
City of Oklahoma City
420 West Main Street, Suite 700
Oklahoma City, OK 73102

Dear Mr. Wenger,

Enclosed is the Oklahoma Turnpike Authority's portion of the Annual Report to be submitted to the United States Environmental Protection Agency (EPA) in accordance with the City of Oklahoma City's Separate Storm Sewer System (MS4) Permit Number OKS000101. This report covers the period from January 1, 2015 through December 31, 2015.

Please provide this office with one copy of the Annual Report when it is submitted to EPA.

Sincerely,

Edward Dihrberg, P.E.
Project Engineer

OKLAHOMA
TURNPIKE
AUTHORITY

NPDES Permit No. OKS000101
January 1, 2015 through December 31, 2015
Annual Report for
Oklahoma Turnpike Authority (OTA)

1. Status of the Implementation of the Storm Water Management Program.

Requirements outlined in the Part 2 of OPDES Permit OKS000101 have been met.

Structural Controls and Storm Water Collection System Operations:

All of OTA's below ground stormwater carrying structures are inspected on a biannual time schedule as part of OTA's commitment to a superior functioning stormwater system. In 2014, forty five (45) structures were inspected on the Turner Turnpike. Any unacceptable conditions were reported immediately to the maintenance and engineering staff for review and action.

Above ground stormwater controls are monitored daily by the maintenance staff who are equipped to handle any flow problems that could arise. Examples of such controls include detention areas and roadside ditches. To ensure the stormwater is flowing efficiently, OTA mows five (5) cycles per season. Approximately one thousand and eighty one (1081) acres are mowed per cycle.

Roadways:

Seventy five (75) lane miles are swept twice per year to ensure that the Kilpatrick and Turner Turnpikes are operating in a manner that will minimize discharge of pollutants from the roadway. During this operation, shoulders are swept to remove accumulated sediment, salt, and other debris.

In addition to the thirteen (13) trash containers that are maintained year around along the Kilpatrick and Turner Turnpikes, maintenance staff also collected and

properly disposed of approximately five hundred sixty eight (568) cubic yards of trash.

The OTA also participates in the Great American Clean-up from March to May, in which trash and litter are picked up from the Turnpike roadsides and the volume is reported to the Keep Oklahoma Beautiful (KOB).

Pesticide, Herbicide, and Fertilizer Application:

The OTA requires all turnpike herbicide applicators as well as all contract applicators to be licensed and subject to all of the regulations under the Oklahoma Herbicide Applicators Law including re-certification. Applicators receive yearly training on pesticides, herbicides, and fertilizers chemicals from the Oklahoma Vegetation Management Association. The OTA has fifteen (15) certified applicators on the Kilpatrick and Turner Turnpikes. Approximately two hundred eighty nine (289) gallons of herbicide were applied around sign footings, fences, and at various other locations within the limits of the right of way.

Illicit Discharge and Improper Disposal:

As part of the below ground stormwater control structures inspection, no illicit discharge was detected.

OTA's maintenance staff collected and recycled eight hundred (800) gallons of oil. The oil is routinely picked up at the maintenance yard by a private contractor. In addition to the oil, OTA recycled fifty (50) filters. OTA also returned twenty (20) batteries and thirty five (35) tires for recycling to the location where new ones were purchased.

Spill Prevention and Response:

OTA operates two Maintenance facilities on the Kilpatrick Turnpike, and the OTA has developed a Stormwater Pollution Prevention Plan (SWPPP) for each. Both facilities follow the spill prevention and response procedures specified in Section 3.4 their respective SWPPPs.

Construction Site Runoff:

The OTA understands the importance of construction site runoff and the adverse effects it can cause. As a result, strict guidelines are set forth to ensure that each construction site has adequate controls for reducing pollutants. All construction plans that are produced by or for the OTA have a mandatory Storm Water Management Plan and Erosion Control Plan. These two sheets provide information such as location/description of project, sequence of erosion control activities, area disturbed, name of receiving waters, soil stabilization practices, structural practices, offsite vehicle tracking, layout showing exactly where soil stabilization and

structural practices should be placed, and references to the OTA Standard Specification for all Stormwater Guidelines. The most optimal approach and recommendations are discussed and agreed upon prior to project implementation to guarantee that the best option shall be undertaken for the project.

During construction, all stormwater activities are monitored and enforced daily by the OTA's on-site representative.

Upon project completion, OTA conducts a final inspection and assures that the areas impacted by OTA projects are restored to compliance level within 30 days after the final inspection.

Public Education:

The OTA dedicates space on its website to the subject of Stormwater Management. This website has undergone a major revision. The site includes a link to the Oklahoma City Phase I MS4 Annual Report. The site also includes a phone number the public can call to provide suggestions, make comments, or ask questions about OTA's stormwater program. The phone number was recently made toll free.

Remaining bookmarks that were produced in 2014 are available for distribution and a copy of the 2014 bookmark is available on OTA's stormwater page on the Pikepass website.

Employee Education:

OTA employees primarily rely on training provided by the City of Oklahoma City for stormwater education. Four OTA employees attended Oklahoma City's Stormwater Construction training at the Oklahoma City Zoo on October 27, 2015. This free half day conference discussed the differences between erosion and sediment control, BMP implementation, Post-Construction Controls, and low impact development. In addition, OTA Kilpatrick Turnpike Maintenance employees attend periodic safety meetings which can include stormwater topics. One OTA employee attended the Oklahoma Department of Environmental Quality OKR04 Outreach class in Oklahoma City on May 27, 2015.

Public Participation and Response:

The OTA is part of the anti-litter campaign, "Oklahoma Keep Our Land Grand." As part of this campaign, the OTA offers a toll free number to call to report littering as well as a place to report littering on the website. Individuals who are observed littering are sent a notice to remind them that littering is a punishable offense and that the goal is to keep Oklahoma land looking grand. For the year 2015, seven hundred eighteen (718) litter calls were received by the Pikepass Office, which is 10.6% fewer calls than received in year 2014.

Landscape:

OTA maintains seven (7) wildflower pots and two (2) tree farms on the right-of-way adjacent to the turnpikes.

2. Proposed Strom Water Management Program Changes.

   The OTA does not propose any changes to the Storm Water Management Program.

3. Revision to the Assessment of Controls and the Fiscal Analysis.

   The OTA proposes no revision to the assessments of controls. The Fiscal Analysis is as shown on the City of Oklahoma City's Report.

4. Monitoring Data Accumulated Throughout the Reporting Year.

   Refer to the Regional Storm Monitoring Report.

5. Annual Expenditures for the Reporting Period with a Breakdown for the Major Elements of the Storm Water Management Program and the Budget for the Year Following each Annual Report.

Description	Cost
Structural Controls Inspections	$ 2,750.00
Mowing	202,377.79
Sweeping	5,671.88
Trash Collection and Disposal	97,018.45
Herbicide licensing	800.00
Herbicide	24,018.23
Landscape	6,612.04
Employee Education	119.00
Total	**$339,367.39**

   Approximately $ 350,000.00 will be budgeted for the 2016 fiscal year.

6. A Summary Describing the Number and Nature of Enforcement Actions, Inspection and Public Education Program.

   All enforcement actions in OTA's watershed are issued by the City of Oklahoma City in concurrence with the OTA.

Description	Cost
Structural Controls Inspections	$ 8,325.00
Mowing	202,377.79
Sweeping	5,671.88
Trash Collection and Disposal	97,018.45
Herbicide licensing	800.00
Herbicide	24,018.23
Landscape	6,612.04
Employee Education	119.00
Total	**$344,942.39**

7. Identification of Water Quality Improvements or Degradation.

   OTA is not able to identify any water quality improvements or degradations during this report period.

8. Regional Monitoring Report.

   Please see the City of Oklahoma City's report.

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 gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering 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.

Edward Dihrberg, P. E.
Oklahoma Turnpike Authority

3/25/16
Date

Storm Water Quality Management 2015 Annual Report

The City of
OKLAHOMA CITY