

# KANSAS STORMWATER 2015 ANNUAL REPORT FORM FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Check box if  
this is a new name,  
address, phone, etc.

Permittee Information and Reporting Period

Permittee (Agency Name) Mailing Address: 1 City of Westwood

Mailing Address 2; City: 4700 Rainbow Boulevard, Westwood

State Kansas

Zip Code: 66205

Contact Person: John Sullivan

Contact E-Mail Address: john.sullivan@westwoodks.org

Contact Phone Number: 913-432-1550

Kansas Permit Number: M-M036-SU01 (Example) M – MC21 – SU01

Reporting Period covers activities from January 1, 2015 through December 31, 2015.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28, 2016. This annual report must be submitted as a word or PDF file to KDHE on a standard compact disk (CD). A paper copy of the report may, in addition to the CD, be submitted if the permittee so desires but is not required.

## B. Executive Summary

Append an executive summary to this report which briefly covers the major aspects of the MS4 stormwater management program enacted during the year. In completing the executive summary, the preparer should address the following questions:

1. Were there any aspects of the program that appeared especially effective at reducing pollutants in your stormwater discharge?
2. Were there any aspects of the program that provided unsatisfactory results?
3. What was the most successful part of the program?
4. What was the most challenging aspect of the program?
5. Describe any City/County area MS4 clean-ups and the participation.
6. Describe the elected officials' participation in the stormwater pollution elimination.
7. Describe the collaboration with other organizations to eliminate stormwater pollution.

The executive summary does not need to be extensive and detailed. It is anticipated the executive summaries will range from one half of a page to two pages in length depending on the scope of the program.

**C. Stormwater Management Program**

	Yes	No	Not Applicable
1. Has the Stormwater Management Program (SMP) been developed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Has the SMP been modified during this reporting period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. If the answer to question 2 above was "yes", has the modified SMP been submitted to KDHE for approval?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answer to item 3 is "No" a copy of the modified SMP must be submitted with this annual report. If it is anticipated a measurable goal cannot be met in the next year the SMP should be modified and submitted to KDHE for approval. The modifications may include different BMPs and/or revised goals to avoid being in a position of non-compliance.

**D. Total Maximum Daily Load (TMDL) Best Management Practices**

	Yes	No	Not Applicable
1. Were any best management practices (BMPs) intended to attenuate the discharge of TMDL regulated pollutants implemented? See your permit to determine if TMDL regulated pollutants are listed for the receiving stream affected by your stormwater system.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. List all of the BMPs intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information on the following table on the following pages.			

**D. Total Maximum Daily Load (TMDL) Best Management Practices (Table)**

BMP ID NUMBER	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
	EROSION AND SEDIMENT CONTROL: Review plans, issue permits, track violations and enforcements measures.	Sediment	Number of violations Enforcement measures Documented	# Violations 0 None Required
	FREE SOIL TESTING FOR RESIDENTS: Educate residents that applying fertilizer without a current soil test can result in over application and excessive nutrient runoff. Participants receive a custom report with recommended rates of application and proper timing.	Nutrients	Number of soil tests	759 soil tests county-wide
	PET WASTE BAG DISPENSERS: Installed in city/county parks encouraging pet owners to pick up after pets.	Bacteria	Number of dispensers Number bags used.	6 dispensers 7,500

			Number of inspections	322 residential inspections (required on resale of property) 304 commercial inspections (conducted annually)
			Number of soil profile analysis	62 soil profiles completed
		Bacteria	Number of required repairs	88 minor repairs completed
			Number of permits issued for new construction	82 major repair permits issued for systems that were replaced as a result of a failed inspection.  44 permits issued for new construction

SEPTIC SYSTEM  
INSPECTION PROGRAM:  
Johnson County Department  
of Health and Environment  
staff performs inspections of  
all on-site sewer systems at  
construction and resale of  
property.

**E. Stormwater Management Program Requirements (Six Minimum Control Measures)****1. Public Education and Outreach (Table)**

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. (List presentations & media)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.1	<p>Public Education/Outreach:</p> <p>The city of Westwood partners with the Johnson County Stormwater Management Program (JCSMP) to conduct stormwater education and outreach on a county-wide basis. The JCSMP also partners with Johnson County K-State Extension (KSE) and the Mid-America Regional Council (MARC) for some aspects of public education and outreach.</p> <p>Print media</p>	<p>Number of articles printed and distribution.</p>	<p>The July issue of The Johnson County Magazine featured a one page article on flooding and stormwater quality issues. This article also promoted the “Three for Clean Stormwater” call to action for residents. This magazine was directly mailed to 240,000 households in Johnson County. 728 CITY of Westwood households received this mailing.</p> <p>Three articles written by Johnson County KSE horticulturalist, Dennis Patton, in the Kansas City Star “Grow” section addressed lawn care practices and protecting water quality. The Kansas City Star reports a potential audience of 160,000 and over 850,000 online page</p>

	<p>Radio and television</p> <p>JCSMP education and outreach cont.</p> <p>Social media and websites</p>	<p>Number and type of media and message. Number of impressions.</p> <p>Number of posts, description of message, and engagement by public on posts.</p>	<p>views.</p> <p>Two radio ads that ran on Cumulus and Entercom stations in the Kansas City metro area both with a proper yard waste disposal message during the fall. These ads generated an estimated 180,500 impressions.</p> <p>Outreach messages were posted to Facebook and Twitter from the Johnson County Kansas Government pages and JoCoRecycles pages. Messages focused on education for preventing pollution from lawn care and yard waste management practices. The combined impressions from Facebook and Twitter was approximately 190,000 with about a 3 percent engagement rate.</p> <p>KSE works with <i>The Star</i> to develop a blog called KC Gardens. Extension submits weekly columns on a wide range of topics. Information on water quality education is included throughout the year. Three columns focused on this topic and many of these articles were also reprinted in the Sunday paper. One column titled "The</p>
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		<p>Ten Commandments of Water Quality” received a great deal of interest. The blog received over 70,000 views in 2015.</p> <p>Potential reach - <i>The Kansas City Star</i> shares the weekly blog columns on their social media platforms including Twitter and Facebook. Since <i>The Star</i> is a privately held company, circulation numbers are difficult to obtain and report. Based on feedback, each column has the potential to reach 1 million views either in print or electronic formats. Total potential reach is 6 million.</p> <p>K-State Extension Facebook also is used to promote water quality education. Extension posted three posts about water quality issues. Based on social media views this content reached over 20,000 individuals.</p> <p>Healthy Yards Expo. This annual event is a partnership between the JCSMP, Johnson County K-State Extension, and the cities of Lenexa, Overland Park, and Shawnee that hosts 32 vendors who promote best management practices for residential lawn care management. Eleven</p>
JCSMP education and outreach (cont.) Social media and websites (cont.)		
Presentations and events		

	JCSMP education and outreach (cont.) Presentations and events (cont.)	<p>presentations with a total of 180 attendees were also given during the day on various healthy yard topics. This year's event also featured a native plant giveaway. Native plants were given to 300 attendees. The event overall had 850 attendees.</p> <p>The Water Quality Education Grant program for non-profit organizations and educators for water quality education programming is funded by the JCSMP. The Blue River Watershed Association, Bridging the Gap, Friends of the Kaw, Stone Lion Puppet Theater, and the Olathe North High School Geosciences program received grants this year. The grant program enables a variety of outlets for education opportunities across Johnson County that engages with a range of age-groups. The following is a summary of presentations and participation numbers.</p> <ul style="list-style-type: none"><li>• Classroom instruction: 9 classes; 1000 middle and high school students</li><li>• Presentations to Businesses: 7 presentations; 149 adults</li><li>• Stone Lion Puppet Theater performances: 33 performances; 7900 elementary age students</li><li>• Stone Lion Puppet Theater</li></ul>
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	JCSMP education and outreach (cont.) Presentations and events (cont.)	<p>"Splash Carnivale" family water quality event: 5 schools; 1400 attendees (families)</p> <ul style="list-style-type: none"><li>• Stream Clean Ups: 15 stream clean up events were held by 3 organizations with a total of 883 participants who collected a combined 247 bags of litter.</li><li>• Rain Barrel Workshops: 4 workshops held with a total of 60 participants who built a total of rain barrels 70 rain barrels to be used at their residence.</li><li>• Rain Garden Workshop: 35 people attended an educational presentation on rain gardens. 20 of these attendees won rain garden plants and an opportunity to discuss placement and installation with expert volunteers.</li></ul> <p>The JCSMP has partnered with the Johnson County League of Women Voters to promote a "Three for Clean Stormwater" campaign, which is a call to action for residents to choose three practices that will reduce the amount of polluted stormwater leaving their properties. The League has presented to approximately 200 individuals and distributed 140 "Three for Clean Stormwater" flyers.</p> <p>K-State Extension Master Gardener (EMG) volunteers also provide water quality educational</p>
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					content at a variety of festivals and events in the County. EMGs tabled at 5 events in 2015 and reached over 2,000 individuals with water quality messaging.
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## 1. Public Education and Outreach (Table) (Continued)

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. (List presentations & media)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
	Survey conducted to determine resident's current education level regarding water quality and how individual actions can affect pollution in runoff. The survey will help guide education and outreach efforts in the future and serve as a measuring stick for past education and outreach efforts.	Survey conducted and results analyzed.	A survey of Johnson County residents was conducted in the fall 2015 by ETC Institute. A total of 1,372 residents completed the survey giving a 95% level of confidence with a precision of at least +/- 2.6 in the results. Responses will be used to improve future education and outreach efforts.
1.2	Annual Program Review: Assess applicability of BMPs for MCM1 in SMP	Review and revise as necessary	No revisions required

## 2. Public Involvement and Participation (Table)

List all of the public involvement and participation BMPs as identified in the SMP and provide the requested information in the following table. (List all associations & partnerships)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
2.2	Mechanism for Public Comment on the community's stormwater management plans and regulations for each community. Post annual reports and current stormwater management plan on website or other publicly available mechanism. Provide opportunity for the public to comment on the community's stormwater management plans and regulations.	Documents published in appropriate location  Public review and comment allowed	City Website  No Comments Received
2.3	Comply with Public Notice Provisions: Comply with applicable state and local public notice requirements when developing and revising the Stormwater Management Plan and Stormwater regulations. Provide opportunity for public comment and provide feedback to public comment as required.	Stormwater Management plans advertised when developed and as revisions are made.  Comments addressed	No Revisions  No Comments

<p>2.1</p>	<p>Promote Community Involvement in Stormwater Quality Awareness and Solutions: The JCSMP provided funding on behalf of all MS4 permitted cities in Johnson County for the following public participation programs:</p> <ul style="list-style-type: none"> <li>a) Soil testing program: All residents of Johnson County are eligible for free soil testing through the Johnson County K-State Extension office.</li> <li>b) Stream clean-ups:</li> <li>c) Rain barrel and rain garden workshops:</li> </ul>	<p>Number of soil tests conducted and water quality education provided</p> <p>Number of participants and volume of litter removed from area streams.</p> <p>Number of participants in educational activities and number of rain barrels and rain gardens installed.</p>	<p>Soil test results are provided to residents along with educational material for best management practices for fertilizer application and lawn care. 759 soil tests were conducted county-wide in 2015.</p> <p>With funding provided by the JCSMP to the water quality education grant program, three non-profit organizations (Bridging the Gap, the Blue River Watershed Association, and the Friends of the Kaw) held 15 stream clean up events with a total of 883 participants who collected a combined 247 bags of litter.</p> <p>Through the JCSMP water quality education grant program, stormwater education classes were held by students from Olathe North High School and were supervised by the lead teacher for the district's geosciences program. These</p>
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				classes were attended by 95 residents.
2.4	Annual Program Review: Assess applicability of BMPs for MCM 2 in SMP	Review and revise as necessary	No revisions required	

**3. Illicit Discharge Detection and Elimination**

Place a check mark in the appropriate box.

Explain each item below in following table.

Yes      No      Not Applicable

1. Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?

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2. Has a map of the MS4 been developed, showing the location of all outfalls, either pipes or open channel drainage, showing names and location of all streams or lakes receiving discharges from the outfalls?

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3. The permit requires the permittee enact ordinances Resolutions or regulations. Has an ordinances, resolutions or regulations to prohibit non-stormwater discharges into the storm system been enacted?

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Effective Date: February 14, 2008

Has the ordinance, resolution or regulation been modified?

Effective Date: No

4. Has the ordinance, resolution or regulation and/or modification been submitted to KDHE for approval?

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5. Have public employees, business, and the general public been informed of the hazards associated with illegal discharges and improper disposal of waste?

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6. Have stormwater inlets & detention ponds been inspected?

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7. Are restaurant waste grease areas inspected?

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8. Are septic systems inspected?

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9. Are the streets swept frequently?

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10. Is there a yard waste management program?

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11. Are snow removal activities inspected?

☒☐

12. List all of the illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the table on the following pages.

### 3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.1	Pollution Prevention Ordinance: Review and update the Stormwater Pollution Prevention Ordinance and enforcement procedures as needed.	Ordinance reviewed and update (if required)	Chapter 15 of the Westwood Municipal Code is in-place. No updates needed.
3.2	Pollution Prevention Hotline: Maintain phone hotline and online mechanism for reporting illicit discharges: conduct investigations and/or forward to appropriate agencies.	Number of calls/reports received, number of investigations completed, results/compliance actions taken.	On-line report mechanism is in-place. No reports
3.3	Implement IDDE Plan: Implement plan to detect, identify the source, and eliminate non-stormwater discharges to the MS4.	Plan Implemented Actions Documented	Yes Yes
3.4	Conduct training for detection of illicit discharges: Train Westwood Public Works staff in how to detect illicit discharges and response per the plan.	Successful elimination of any illicit discharges detected during our annual inspection.	Annual Inspection Performed
3.5	Storm Sewer System Map: Maintain updated map of MS4 showing storm sewer outfalls and names and location of all waters of the US that receive discharges from outfall.	Map updated and submitted to KDHE	No updates required

3.6	HHW Collection: The JCSMP provided financial assistance to the DHE and the city of Olathe's HHW Collection programs. This funding allowed for an increase in drop-off appointments at both facilities that would not have otherwise been possible.	Number of residents served  Pounds of Hazardous Material collected	12,460 participants county-wide  1,214,871 pounds of hazardous waste collected
3.6	HHW Education: Public education campaign to encourage residents to use the program and importance of proper HHW disposal.	Social media Radio ads Local media coverage	The Johnson County Department of Health and Environment promotes the HHW program through various media outlets. This year posts on the JoCoRecycles Facebook page had a reach of 113,844 and 9,250 engagements (likes, shares, comments, click throughs). The twitter page had 54,930 impressions and 1,580 engagements. The JCDHE HHW collection site was also featured in 2 television news stories by Kansas City Fox Channel 4 in March and August 2015. The JCDHE also ran radio ads for the collection site on Spanish radio in July. There were 92 ads over two weeks.
	Septic System Inspection Program: Johnson County DHE staff performs inspections of all on-site sewer systems at construction and resale of property	Number of inspections  Number of soil profile analysis  Number of required repairs	322 residential inspections (required on resale of property) 304 commercial inspections (conducted annually)  62 soil profiles completed 88 minor repairs completed

				82 major repair permits issued for systems that were replaced as a result of a failed inspection.  44 permits issued for new construction
		Number of permits issued for new construction		
3.7	Annual Program Review: Assess applicability of BMPs for MCM3 in SMP	Review and revise as necessary		No revisions required

**4. Construction Site Stormwater Runoff Control**

Place a check mark in the appropriate box.

Explain each item below in following table.

Yes      No      Not Applicable

1. The permit requires the permittee to enact ordinances, resolutions or regulations. Has an ordinance, resolutions or regulation to address construction site runoff from new development and redevelopment projects been enacted?

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Effective Date: February 14, 2008

2. Has a copy of the ordinance, resolution or regulation been submitted to KDHE as required by the permit?

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3. Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?

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4. Has a procedure or program been developed requiring construction site owners and/or operators to control waste such as discarded building materials, concrete truck washout, chemicals, paint, litter and sanitary waste at construction sites likely to cause adverse impacts to water quality?

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5. Has a procedure been developed and implemented requiring site plan review of erosion control and debris container locations incorporating consideration of potential water quality impacts?

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6. After review, is a construction site permit issued?

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7. Has a procedure been developed for the receipt and consideration of information submitted by the public?

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8. Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?

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9. Are construction site inspection and enforcement actions successful?

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10. Are site owners and/or operators provided instruction On proper construction site erosion and waste control?

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11. List all the construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the table on the following pages.

#### 4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.1	Review regulation and update (if necessary)	Review regulation Update as necessary	No updates required
4.2			
4.3	Inspection and Enforcement: Review Plans, issue permits, track violations and enforcements measures.	Number of violations Violations and enforcement measures documented	No Violations
4.4	Receipt of Public Information on Compliance: Provide a mechanism for receipt and consideration of information submitted by the public on construction site compliance.	Number of Reports Investigation/Actions Documented	No Reports None Required

## 4. Construction Site Stormwater Runoff Control (Table) (continued)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.5	Contractor Training: Provide education and informational resources for contractors licensed in Johnson County. This year the Johnson County Contractors Licensing Program offered the 8-hour the "ABCs of BMPs" class that instructs contractors on proper erosion and sediment control at construction sites.	Number of individuals trained.	104 attendees
	Annual Program Review: Assess applicability of BMPs for MCM4 in SMP	Review and revise as necessary	No revisions required

## 5. Post-Construction Site Stormwater Management in New Development and Redevelopment.

Place a check mark in the appropriate box.

Explain each item below in following table.

Yes

No

1. The permit requires the permittee to enact a program to address post-construction site stormwater runoff from new development and redevelopment.

The program developed to manage stormwater in new development and redevelopment projects must include the following elements:

- a. Strategies which include a combination of structural and/or Non-structural BMPs,
- b. Measures to ensure adequate long-term operation and maintenance of BMPs,
- c. Site Owner or operator name and telephone number Responsible to ensure adequate long-term operation Maintenance of BMPs,
- d. BMPs to prevent or minimize adverse water impacts.

2. Has a post-construction stormwater runoff program been Implemented?

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3. Has post-construction sites been inspected?

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4. Have there been post-construction violations?

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5. List all the post-construction site stormwater management in new development and redevelopment BMPs as identified in the SMP and provide the requested information in the table on the following pages.

**5. Post-Construction Site Stormwater Management in New Development and Redevelopment Table**

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
5.1	Implement Post-Construction Stormwater Runoff Control Program: Implement program requiring control of stormwater runoff from new development and redevelopment projects that disturb greater than one acre of land, and requirements for long-term maintenance of structural controls. Required elements of this program include.		
5.2			
5.3	a) SITE PLAN REVIEW: Ensure site plans incorporate appropriate post-construction runoff controls designed according to previously adopted standards/design manual.	Plans Reviewed	None Required
5.4	b) FINAL CONSTRUCTION INSPECTION: Perform final inspection (or obtain certification from design engineer) to ensure that all post-construction runoff controls were installed according to plans and functioning as designed.	Number of Construction Inspections	None Required
5.5	c) TRACKING SYSTEM: Maintain database (or other system) to track location and contact information of responsible party for all structural post-construction runoff controls	Database Updated	Not Required
	d) LONG TERM MAINTENANCE: Implement an inspection and enforcement program to ensure adequate long-term maintenance of structural post-construction runoff controls.	Number of Maintenance Inspections	None Required
		Number of Violations	None
		Enforcement Actions Documented	None Required

	Provide training opportunities for professionals who design, install, and maintain post-construction stormwater treatment facilities.	Classes offered and number of participants	A class for installation and maintenance of stormwater BMPs was offered by MARC on Nov 12 and 13, 2015. There were 40 attendees.
5.6	Annual Program Review: Assess applicability of BMPs for MCM5 in SMP	Review and revise as necessary	No revisions required

## 6. Municipal Pollution Prevention/Housekeeping.

Place a check mark in the appropriate box.

Explain each item below in following table.

	Yes	No
1. The permit requires the permittee to enact a program to address Pollution Prevention/Good Housekeeping for Municipal Operations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Has an operation & maintenance program to reduce Pollutant runoff and an audits /inspection program been adopted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Has a municipal employee training program been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Are oil, hazardous wastes, chemicals and municipal debris properly disposed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Are snow and ice removal material and chemicals properly managed to prevent runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Are municipal streets swept on a regular basis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are municipal stormwater inlets and drains inspected and cleaned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Are municipal snow piles controlled drainage to prevent runoff pollution?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

List all the Municipal Pollution Prevention/Housekeeping BMPs as identified in the SMP and provide the requested information on the table on the following pages.

## 7. PHASE I OPERATORS ONLY - Monitoring Industrial and High Risk Run-off

Place a check mark in the appropriate box.

	Yes	No
1. Has the permittee developed and maintained a list of the municipal industrial facilities contributing to the pollutant loading to the municipal storm sewer system?	<input type="checkbox"/>	<input type="checkbox"/>
2. Has at least two municipal industrial facilities on the list had inspection and sampling conducted?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to items 1 and 2 is "No" provide a statement on the Phase I operator form Appendix B as to why monitoring and control has not occurred.

Complete Monitoring form in Appendix B.

**6. Municipal Pollution Prevention/Housekeeping Table**

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.1	<p>Reduce Pollutant Runoff From Municipal Operations: Required elements of this program include.</p> <p>a) STORMWATER MANAGEMENT AUDITS: Periodically audit community-owned facility(s) and/or community operations that may potentially impact surface water through the MS4.</p> <p>b) STORMWATER POLLUTION PREVENTION PLANS: Develop SWPPP(s) for facility(s) and/or operation(s).</p>	<p>Facility Name/Operation Date of last audit</p> <p>SWPPP(s) completed and on file</p>	<p>Public Works Facility 1-2015</p> <p>Yes</p>
6.2	<p>Municipal Employee Training: Implement training program for employees and document training.</p> <p>a) STORMWATER TRAINING VIDEOS: The videos Rain Check and Stormwatch are available through the JCSMP. The video focuses on reducing stormwater pollution from municipal facilities and activities.</p>	<p>Number of city attendees</p>	<p>3 city attendees</p>

**5. Municipal Pollution Prevention/Housekeeping Table**

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.3	Annual Program Review	As needed, note revisions in annual report and update SMP	No Changes

**F. Recordkeeping and Reporting**

Attach a report which addresses the following subjects:

1. A general assessment of the appropriateness of the various BMPs included for each of the major program elements as follows:
  - a. TMDL regulated pollutants (Appendix A contains TMDL Report Forms)
  - b. Public Education and Outreach
  - c. Public Involvement and Participation
  - d. Illicit Discharge Detection and Elimination
  - e. Construction Site Stormwater Runoff Control
  - f. Post-Construction Site Stormwater Management in New Development and Redevelopment
  - g. Pollution Prevention/Good Housekeeping for Municipal Operations

Issues which may be addressed include:

- a. Are the BMPs appropriate for local population?
  - b. Are the BMPs appropriate for the pollution sources?
  - c. Are there specific concerns related to the local receiving waters that may justify a change in BMPs?
2. An assessment of the effectiveness of the BMPs towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).
3. Provide a summary of results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the SMP.
4. Provide a summary of the planned changes in stormwater activities which are scheduled to be undertaken during the next annual reporting cycle. This should address the implementation of new BMPs and/or the deletion of BMPs and include a projected schedule for the month or quarter when the BMP will be either implemented or discontinued. Please note a revised SMP should be submitted for KDHE approval if BMPs are revised.
5. Provide a list of other municipalities/contractors, if any, which will be responsible for implementing any of the program areas of the SMP.

**G. 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 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."

Signature of Permittee: \_\_\_\_\_  
(Legally responsible person)

Date Signed: \_\_\_\_\_

Name (printed): John Yé Title: Mayor

**40 CFR 122.22 Signatories to permit applications and reports.**

(a) Application. All permit applications shall be signed by either a principal executive officer or ranking elected official.

All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.  
Submit this report to:

**KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT**

Municipal Programs Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367

## B. Executive Summary

Append an executive summary to this report which briefly covers the major aspects of the MS4 stormwater management program enacted during the year. In completing the executive summary, the preparer should address the following questions:

1. Were there any aspects of the program that appeared especially effective at reducing pollutants in your stormwater discharge?
2. Were there any aspects of the program that provided unsatisfactory results?
3. What was the most successful part of the program?
4. What was the most challenging aspect of the program?
5. Describe any City/County area MS4 clean-ups and the participation.
6. Describe the elected officials' participation in the stormwater pollution elimination.
7. Describe the collaboration with other organizations to eliminate stormwater pollution.

The City of Westwood partnered with the Johnson County Stormwater Management Program (JCSMP), who coordinated a cooperative approach for permitted Johnson County cities to help meet selected minimum control measures mandated in the NPDES Phase 2 MS4 permits. In particular, the JCSMP coordinates efforts for best management practices (BMPs) under minimum control measures 1 and 2, but have also assisted with MCM's 3-6 as well. The coordinated approach through this partnership has proved to be cost effective and reduces redundancy amongst the cities in Johnson County.

- 1) Due to the nature of non-point source pollution, it is difficult to say that any aspect of the program was the most effective at reducing pollutants in stormwater runoff. However, we believe that our efforts under public education (MCM 1) and public participation (MCM 2) that were focused on responsible lawn care practices and anti-littering were very successful at reaching a broad number of residents with messaging that hopefully will encourage behavior change or, at the very least, increase awareness. *An estimated 7 million impressions were generated through print media, radio messaging, events, social media and other web-based outreach countywide in 2015.*
- 2) None of the 6 program elements were unsatisfactory
- 3) Public education and outreach efforts through the multiple approaches from the city and county levels were successful. The ability to do outreach through print, radio, and social media will hopefully continue to increase the public's awareness of water quality issues and how they can help. Additionally, the partnership with K-State Extension promotes water quality messaging where the public seeks information regarding their lawn and garden care therefore targeting the likely source for excess nutrients in urban streams.

- 4) The most challenging aspect of this program has always been drawing a correlation between activities in the SMP to actual improvements in water quality. For example, we reached millions of people with our public education and outreach campaigns, but there is no direct way to attribute this to actual pollutant reduction numbers.
- 5) The City of Westwood along with the 19 other communities within Johnson County partnered with the Johnson County Stormwater Management Program to sponsor the following events:
  - Oak Park Carpenter Elementary (OP): 78 participants- 6 bags of litter
  - Indian Hills Middle School (students from PV, Leawood, Mission Hills, Fairway, OP, Roeland Park, Westwood Hills, Westwood, Mission Woods, and Mission): 196 participants- 12 bags of litter
  - Hocker Grove Middle School (students from Merriam, Mission, OP, Shawnee, and Roeland Park)—274 participants- 13 bags of litter
  - Indian Woods Middle—(students from OP, Leawood, Lenexa)—12 participants- 6 bags of litter
  - Mill Creek Middle School—(students from Shawnee and Lenexa)—104 participants—6 bags of litter
  - Shawnee Mission Park (7900 Renner Rd, Lenexa, KS)—11 participants—58 lbs of litter
  - Chatlain Park, Merriam, KS: 14 participants—166 lbs of litter
  - Streamway Park near 106<sup>th</sup> and Quivira Rd, OP—17 participants—166 lbs of litter
  - Walking trail near K-7 and Clear Creek Pwky- Shawnee: 9 participants—308 lbs of litter
  - Turkey Creek near 7920 Marshall Dr., Lenexa: 15 participants—218 lbs of litter
  - Little Cedar Creek Streamway trail—Olathe: 33 participants—528 lbs of litter
- 6) Like many elected officials the participation by them may not be apparent but behind the scenes they are aware and supportive of the efforts through funding and legislation that has been passed.
- 7) The City of Westwood partners with the Johnson County Stormwater Management Program, which partners on behalf of Johnson County cities with the Mid-America Regional Council Water Quality Education Committee, Johnson County K-State Extension, the city of Olathe Public Works (for Household Hazardous Waste Collection), and the Johnson County Department of Health and Environment.

## **F. RECORDKEEPING AND REPORTING**

1. A general assessment of the appropriateness of the various BMPs included for each of the major program elements, as follows below. Issues which may be addressed include:
  - Are the BMPs appropriate for local populations?
  - Are the BMPs appropriate for the pollution sources?
  - Are there specific concerns related to the local receiving waters that may justify a change in BMPs?

### **A. TMDL regulated pollutants**

The City of Westwood does not have any TMDL regulated pollutants identified within our jurisdiction.

In addition to any City specific BMP's the JCSMP also sponsored several efforts targeted at attenuating the discharge of TMDL regulated pollutants on behalf of all MS4 permitted cities in Johnson County. BMP's include: 1) erosion and sediment control inspector training for sediment, 2) free soil testing for nutrients, and 3) free pet waste bags/dispensers and septic tank inspections for bacteria. We feel that these BMPs are appropriate for the TMDL regulated pollutant and our local population. There are no concerns for receiving waters that would justify a change in these BMPs.

### **B. Public Education and Outreach**

The JCSMP sponsored a variety of BMP's on behalf of all MS4 permitted cities in Johnson County. The public education and outreach BMP's ranged from traditional face-to-face education in the classroom, at community events, and expos to more general print, radio, and web-based outreach. *In all, an estimated 7 million impressions were generated from these activities.* We feel these BMP's are appropriate for this MCM and the local populations. Coordinating efforts at the county and regional level has led to a more consistent message and will hopefully be more effective at influencing behavior changes. Additionally, our partnership with K-State Extension promotes water quality messaging where the public seeks information regarding their lawn and garden care therefore targeting the likely source for excess nutrients in urban streams. There are no concerns for receiving waters that would justify a change in these BMPs.

### **C. Public Involvement and Participation**

The JCSMP sponsored a variety of activities on behalf of all MS4 permitted cities in Johnson County. The public participation and involvement BMP's included the free soil testing program for Johnson County residents in partnership with the Johnson County K-State Extension Program. We feel these BMP's are appropriate for this MCM and the local populations. Residents who take part in the free soil testing program receive a custom report with recommended rates of application and proper timing as well as education on actions that can be taken on by residents to benefit water quality. There are no concerns for receiving waters that would justify a change in these BMPs.

#### **D. Illicit Discharge Detection and Elimination**

The City of Westwood has passed an ordinance to prevent the discharge of pollutants from land and activities into the MS4. The City has also implemented a plan to detect, identify, and eliminate non-stormwater discharges into the MS4. In addition to these city specific BMPs the JCSMP sponsored countywide HHW collection activities at Olathe Municipal Services and the Johnson County Household Hazardous Waste Facility. In addition, the Johnson County DHE also performed inspections of septic systems at construction and resale of property. We feel these BMP's are appropriate for this MCM and the local populations. Our IDDE ordinance gives the city the enforcement tools necessary to require responsible parties to eliminate the illicit discharges. The countywide HHW program encourages residents to dispose of HHW properly, thereby reducing illegal dumping. The septic inspection program identifies deficiencies and forces homeowners to bring septic system back into compliance before the property can be sold. There are no concerns for receiving waters that would justify a change in these BMPs.

#### **E. Construction Site Runoff Control**

The City of Westwood has passed an ordinance to control the release of pollutants from construction site activities. The City has also adopted procedures for construction site inspection and enforcement of control measures. The procedures address preconstruction planning and permitting, recommended inspection frequency, recordkeeping and reporting, enforcement response plan, and tips for inspecting construction sites. In addition to these city specific BMP's the Johnson County Contractor Licensing Department offered educational training on proper erosion and sediment controls on construction sites and administered a test to become a Certified Inspector in Johnson County. We feel these BMP's are appropriate for this MCM and the local populations. Our E&SC ordinance gives the city the enforcement tools necessary to require responsible parties to reduce pollution caused by construction activities. While sediment pollution remains a concern for receiving waters, it does not would justify a change in these BMPs at this time.

#### **F. Post-Construction Site Stormwater Management in New Development and Redevelopment**

The City of Westwood has passed an ordinance requiring control of stormwater runoff from new development and redevelopment projects that disturb greater than one acre of land and do not exceed runoff amounts preconstruction, and requirements for long-term maintenance of structural controls. The City has also adopted procedures track the location of all structural controls and the contact information for the person responsible for long-term maintenance. We feel these BMP's are appropriate for this MCM and the local populations. Our ordinance gives the city the enforcement tools necessary to require owners to install and maintain post construction runoff controls. parties to reduce pollution caused by construction activities. There are no concerns for receiving waters that would justify a change in these BMPs.

## **G. Pollution Prevention/Good Housekeeping for Municipal Operations**

The City of Westwood has a SWPP in place for its Public Works facility. The facility is inspected annually for compliance with the existing plan and evaluated for any changes that may need to be implemented to improve any deficiencies.

2. An assessment of the effectiveness of the BMPs towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).

The BMPs were effective toward achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable. Particularly effective were:

The cooperative approach Johnson County municipal entities utilized to implement Public Education/Outreach and Public Participation/Involvement. By pooling financial and technical resources within the county and with the region, municipal entities were able to implement consistent educational messages raise awareness of water quality and begin to change behavior. Also, this cooperative effort has extended towards developing and implementing ordinances, policies, and implementing appropriate Best Management Practices that will also have a beneficial impact on water quality in our watersheds. The cooperative approach is important as we tackle inter-jurisdictional challenges posed by addressing TMDLs. Municipal entities will continue to work cooperatively on permit compliance for the next permit cycle.

3. Provide a summary of results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the SMP.

No additional information or monitoring data was collected during this permit year.

4. Provide a summary of the planned minor changes in stormwater activities to accomplish the SMP designated goals that are scheduled to be undertaken in the next annual reporting cycle.

No changes are planned at this time.

5. Provide a list of proposed major changes to the SMP. This should be a list of major changes in direction for any of the designated goals of the SMP. It does not include the minor changes in stormwater activities (listed in item 4) being planned to accomplish a previously designated goal. Examples of a major change would be the implementation of new BMPs and/or deletion of a BMP. Include a projected schedule for the month or quarter when the BMP will be either implemented or discontinued.

No changes are planned at this time.

6. Provide a list of other municipalities/contractors, if any, which will be responsible for implementing any of the program areas of the SMP.

The City of Westwood is ultimately responsible for permit compliance, however assistance with various program areas of the SMP were provided by the following entities:

**MCM1:** MARC, K-State Research and Extension, JCSMP

**MCM2:** K-State Research and Extension, JCSMP

**MCM3:** JCSMP, JCDHE,

**MCM4:** Johnson County Contractor licensing

**MCM5:** MARC

**MCM6:** JCSMP

**Record Keeping and Reporting:** Assistance provided by JCSMP