

**KANSAS STORMWATER 2017 ANNUAL REPORT FORM  
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS  
(MS4s)**

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

Permittee Information -

Permittee (Agency Name) Mailing Address 1: Kansas Department of Transportation

Mailing Address 2: 700 SW Harrison, 8<sup>th</sup> Floor \_\_\_\_\_

Municipality: Topeka \_\_\_\_\_

State: Kansas

Zip Code: 66603 \_\_\_\_\_

MS4 Program Contact Person: Clay Adams \_\_\_\_\_

Contact E-Mail Address: [Clay.Adams@ks.gov](mailto:Clay.Adams@ks.gov) \_\_\_\_\_

Contact Phone Number: 785-296-3233 \_\_\_\_\_

Construction Issues Contact Person: Jason Van Nice \_\_\_\_\_

Contact E-Mail Address: [Jason.VanNice@ks.gov](mailto:Jason.VanNice@ks.gov) \_\_\_\_\_

Contact Phone Number: 785-368-7263 \_\_\_\_\_

Kansas Permit Number: M-KS38-SU01, Manhattan \_\_\_\_\_

(Example) M- MC21- SU01

Reporting Period covers activities from January 1, 2017 through December 31, 2017.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28, 2018. This annual report must be submitted as a PDF file to KDHE on a standard compact disk (CD). **In addition**, provide the current copy of the Stormwater Management Program (SMP) Document as a PDF file on the CD.

## **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.
8. If an audit/inspection of your MS4 program was conducted by EPA or KDHE during the year, list the items the audit/inspection report identified as required changes and provide a narrative explanation of how the changes were implemented or explain the plan to implement the changes and identify a target date for final implementation.

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.

## Part B. Executive Summary

### Executive Summary

The Kansas Department of Transportation will continue implementation of the BMPs put in place since 2003. KDOT continues to collaborate with organization through the Adopt-A-Highway and Sponsor-A-Highway programs to facilitate the picking up of litter along the roadsides. KDOT continues its Construction Stormwater Runoff Control Program started in 2013. KDOT has met its obligation under the Construction Stormwater Consent Decree, September 5, 2013 and the decree has been terminated as of January 30, 2018. KDOT enhanced the stormwater erosion control training that is required for our maintenance supervisory staff and contractors' personnel. KDOT's Roadway Design process evaluates construction projects for the upstream/downstream impact on water drainage at a Q-100 rain event. As a rule, waterway alignments are not changed. Our design practice is to leave the downstream condition in as good as or better than the condition prior to construction. Our shops and yards are kept in good order. KDOT conducts an annual chemical storage inspection, Spill Prevention Control and Countermeasure Plan training. KDOT's equipment is washed in wash bays and salt is stored under cover/roof. KDOT currently has mapped our outfalls and is in the second year of our stormwater monitoring program.

KDOT has been successful in managing the reduction of sediment and erosion through the implementation of the BMPs such as maintaining grass and native plantings within our right-of-way. The installation of rock riprap is used to stabilize slopes and reduced erosion. KDOT has implemented a stormwater sampling program and is evaluating the benefits thereof. KDOT has published a Stormwater Management informational web page. The web page offers stormwater and illicit discharge pollution awareness information to the general public. The public is asked to report any illicit discharge observed on the right-of-way. KDOT continues to strive to do our best with limited resources.



**C. Stormwater Management Program**

Place a check mark in the appropriate box.

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

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 review. 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**

Place a check mark in the appropriate box.

	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.	X	<input type="checkbox"/>	<input 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 in the following table.			

**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)
0.1	Maintain grass lined ditches	Sediment	Over 70% vegetated ditch on all non-construction permit status ditches.	Ongoing BMP management
0.2	Riprap	Erosion Control	As a highly erodible area identified to be in need, the Area Office may be scheduled to install rock riprap treatment.	Work is scheduled on an as needed basis.
0.3	Stone Ditch Checks	Erosion Control	As a highly erodible area is identified to be in need, the Area Office may be scheduled to install a stone ditch check.	Work is scheduled on an as needed basis.

**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	Establish a Stormwater Management informational web page.	Establish Stormwater Management informational web page.	The Stormwater Management informational web page has established and published on the KSDOT.org web site, February 14, 2017.

**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)
1.2	Adopt-A Highway Safety Video	Reviewed by Adopt-A-High groups	Safety Video is distributed to the Area Offices to distribute to the volunteers.
1.3	Adopt-A-Highway Safety Brochure	Publish Safety Brochure	Safety brochure is distrusted to the Area Office to distribute to the Adopt-A-Highway volunteers.



**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)
1.4	Host a Public Information booth at the Kansas State Fair in Hutchinson	Staff Booth at the State Fair	KDOT staffed a booth at the Kansas State Fair in September 2017. Adopt-A-Highway safety materials were distributed. The State Fair reported attendance to be 322,278.
1.5	Issue Public Awareness Announcement highlighting the Adopt-A-Highway Program	Provide News release to the media outlets.	KDOT issued a news release in May 2017 highlighting the Adopt-A-Highway program and inviting the public to volunteer.
1.6	Area Maintenance Superintendents, and KDOT contractors receive Stormwater Pollution Control training.	Provide Training Classes	Area Maintenance Superintendents and Construction Inspectors attend annual stormwater pollution control training.

## 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)
2.1	KDOT invites volunteers to participate in the Adopt-A-Highway program	Groups participate in the Adopt-A-Highway program	KDOT has 13 - Adopt-A-Highway groups and 15 – Sponsor –A-Highway sponsorships in Johnson and Wyandotte Counties.
2.2	Public reporting of Illicit discharges on KDOT right-of-way.	Number of notification	An email link has been set up on Stormwater Management web page. The page went live on February 14, 2017.

**2. Public Involvement and Participation (Table)** (continued)

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)

### 3. Illicit Discharge Detection and Elimination

Place a check mark in the appropriate box.

Address each item below and complete the 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?	X	<input type="checkbox"/>	
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?	X	<input type="checkbox"/>	
3. The permit may require the permittee enact ordinances, or resolutions. Have ordinances, or resolutions, or regulations to prohibit non-stormwater discharges into the storm system been enacted?	<input type="checkbox"/>	<input type="checkbox"/>	X
Effective Date:	_____		
Have the ordinances, resolutions, or regulations been modified?	<input type="checkbox"/>	<input type="checkbox"/>	
Effective Date:	_____		
4. Have the ordinances or resolutions and/or modifications been submitted to KDHE for review?		<input type="checkbox"/>	
5. Have public employees, businesses, and the general public been informed of the hazards associated with illegal discharges and improper disposal of waste?	X	<input type="checkbox"/>	
6. Are stormwater inlets and detention ponds inspected for illicit discharges and debris?	<input type="checkbox"/>	<input type="checkbox"/>	
7. Are restaurant waste grease areas inspected?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Are septic systems inspected?	<input type="checkbox"/>	<input type="checkbox"/>	
9. Are debris, yard waste, and dead animals removed from the streets when noticed by employees or reported?	X	<input type="checkbox"/>	
10. Is there a yard waste management program?	<input type="checkbox"/>	<input type="checkbox"/>	
11. 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	KDOT monitors the Right-of-Way for illicit discharge.	KDOT maintenance staff survey the road system weekly.	KDOT maintenance staff survey the road system weekly. No sewer cross connects, or other illicit discharges were detected in 2017.
3.2	KDOT monitors the highway for debris and dead animals.	KDOT maintenance monitors the roadway daily.	KDOT maintenance staff removed debris and dead animals as they become aware of the need.
3.3	Public reporting of Illicit discharges on KDOT right-of-way.	Number of notification	An email link has been set up on Stormwater Management web page. The page went live on February 14, 2017.

**3. Illicit Discharge Detection and Elimination (Table)** (Continued)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)

#### 4. Construction Site Stormwater Runoff Control

Address each item below and complete the following table:	Place a check mark in the appropriate box.		
	Yes	No	Not Applicable
1. The permit requires the permittee to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and redevelopment projects been enacted?	X	<input type="checkbox"/>	<input type="checkbox"/>
Effective Date: <u>January 2007</u>			
2. Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?	X	<input type="checkbox"/>	
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?	X	<input type="checkbox"/>	
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?	X	<input type="checkbox"/>	
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?	<input type="checkbox"/>	<input type="checkbox"/>	
6. After review, and confirmation the plans are acceptable, is a construction site permit or building permit issued?	<input type="checkbox"/>	<input type="checkbox"/>	
7. Has a procedure been developed for the receipt and consideration of information submitted by the public?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?	X	<input type="checkbox"/>	
9. Are construction site inspection and enforcement actions successful?	X	<input type="checkbox"/>	
10. Are site owners and/or operators provided instruction on proper construction site erosion and waste control?	X	<input type="checkbox"/>	
11. List all the construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the following table.			

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

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.1	Contractor's SWPPP is reviewed by the Area Engineer	All Contractors working on KDOT owned projects submit their SWPPP to KDOT to reviewed /approved by the Area Engineer before construction begins.	100% of the KDOT owned projects will have SWPPPs in place.
4.2	Inspection of stormwater pollution control measure by KDOT personnel in accordance with the KDHE stormwater construction permit.	Complete all required and post rainfall inspections in accordance with the stormwater construction permit.	Complete all required and post rainfall construction site inspections.



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

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)

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

Place a check mark in the appropriate box.

Address each item below and complete the following table:                      Yes                      No                      Not Applicable

- 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. The permit requires the permittee to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and re-development projects been enacted?

Effective Date: \_\_\_\_\_

- 3. Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?

- 4. Has a post-construction stormwater runoff program been implemented?

- 5. Have post-construction sites been inspected? X

- 6. Have there been post-construction violations?                       X

- 7. 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 following table.

**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	KDOT construction projects are reviewed under criteria in KDOT Drainage Design Manual for appropriate Post Construction BMPs.	Publish KDOT Drainage Design Manual	KDOT Drainage Design Manual (Revised May 2011) has been published.
5.2	Utilize permanent erosion control devices to reduce repeated erosion. Such as rock riprap embankment retention, rock riprap lined ditches.	Reduce erosion/stabilize slope	Reduce repeated erosion by the application of permanent erosion control devices.
5.3	Establish 70% vegetation in ditches	Establish 70% vegetation in ditches.	Address the erosion as it is identified. Maintain 70% vegetation in the ditches.
5.4	Regular monitoring the condition of right-of-way by our maintenance department.	Routine monitoring of the condition of the right-of-way, typically a weekly survey of the right-of-way condition.	Maintenance needs are identified and scheduled for repairs.

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

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)

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

Place a check mark in the appropriate box.

Address each item below and complete the following table:

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

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

**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. Have at least two municipal industrial facilities on the list had inspection and sampling conducted?	<input type="checkbox"/>	<input type="checkbox"/>
3. If the answer to items 1 and 2 is "No" provide a statement as to why monitoring and control has not occurred.		

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

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.1	Spill control equipment is to be available at each refueling site.	Spill control kit available	Spill control kit is available at each refueling site.
6.2	Training on Spill Prevention, Control and Counter Measures (SPCC) Plan.	KDOT field employees attend training on Spill Prevention, Control and Counter Measures (SPCC) Plan.	KDOT's field employees are required to attend at least one safety meetings per year on topics of spills.
6.3	Keep Chemicals stored in a proper Chemical Storage area at Area/Sub Area	Observe proper storage of chemicals	Annual facility walk through is conducted. Inventory of all chemicals stored on site is taken and the facility review of the chemical storage location is conducted at the Area/Sub areas.
6.4	Salt and Salt/Sand mix are stored under cover	Salt and Salt/Sand mix are stored under cover	Salt and Salt/Sand mix are stored under cover.

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

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.5	Pre-season calibration of salt/sand spreader equipment	Calibration of spreader equipment.	Salt/Sand Spreader equipment was calibrated in September/October 2017 in preparation for the winter season.
6.6	Street Sweeping	Report the number of cycles	The bridges and barrier walls on K-18 west of Manhattan and the viaduct on K-177 east of Manhattan are swept in the spring following the winter season.
6.7	Utilize wash-bay for all equipment washing	Wash all equipment only in the wash-bay.	All equipment washed only in the wash-bay.





Part V. Reporting

1. General assessment of the various BMPs:

**TMDL Regulated Pollutants** – KDOT collected 3 sets of stormwater samples during the year. There was insufficient rainfall in the 4<sup>th</sup> quarter, thus no stormwater sampling was possible. A summary of the TMDLs is listed below.

**Public Outreach** – KDOT’s public audience has different characteristics than a Municipality. Our audience is limited to training our staff and contractor’s staff working on KDOT owned projects. We require our maintenance superintendents, construction inspectors, and the contractor’s staff to attend stormwater pollution control training. KDOT has published a stormwater information awareness web page on our web site at [www.ksdot.org](http://www.ksdot.org). We provide press releases highlighting anti-liter awareness and encouraging public participation in the Adopt-a-Highway program. KDOT will be preparing a Stormwater Pollution awareness brochure in 2018.

**Public Involvement and Participation** – KDOT encourages the public to participate in the Adopt-A-Highway program. The Adopt-A-Highway program gives the public an opportunity have a tangible impact on reducing liter along the highway right-a-way. Our trained staff and contract staff model proper stormwater pollution control to the general public during construction or maintenance projects along the highway.

**Illicit Discharge Detection and Elimination** – KDOT differs from a municipality in that KDOT typically does not have curbside storm sewer inlets where the public can walk up and discard pollutants such as antifreeze or motor oil. The interstate highway system serving a municipality is restricted access to the general public, therefore reducing the opportunity for illicit discharge. KDOT’s Maintenance Staff monitors the right-of-way weekly, noting any abnormalities. When an abnormality is identified follow-up action is initiated. The weekly surveillance report notes items that need corrective action. The premise of the report makes an assumption that all other items are normal. Discharges such as vehicle fluids released as a result of a vehicle accident are typically cleaned up by an environmental remediation company. Contaminated soil is excavated and removed from the site, fresh soil is brought in to replenish and grass seed sewn.

Liter is addressed through a multi-phase approach. The Adopt-A-Highway and Sponsor-A-Highway programs utilize volunteers and sponsored personnel to pickup liter. Prison work details also pick up trash in the metro area. KDOT staff pick-up trash as time and funding allows.

Dry season discharges in the right-of-way are monitored and report as observed. No illicit discharges were identified in 2017.

**Construction Site Stormwater Runoff Control** - KDOT is not able to enact ordinances, but we do have Policies and Standard Specification for construction projects. KDOT has included language in both that requires compliance with applicable environmental laws. KDOT continues its Construction Stormwater Runoff Control Program started in 2013. KDOT has meet its obligation under the Construction Stormwater Consent Decree, September 5, 2013 and the decree has been terminated as of January 30, 2018. Each contractor is a signatory party to the Stormwater Management Permit for their construction project. This practice has improved contractor compliance with Stormwater Management Permit.

**Post Construction Site Stormwater Management** – KDOT manages the construction stormwater control BMPs following a construction project until 70% vegetation cover has been established. KDOT maintenance staff monitors the right-of-way weekly. When an erosion control need is identified, KDOT will schedule repairs to be made, typically within 90 days. KDOT utilizes the Drainage Design Manual to design new drainage to control the volume and velocity of the drainage to avoid adverse impacts downstream from the project. Project parameters and downstream conditions are checked at a Q-100 rain event.

**Municipal Pollution Prevention/Housekeeping** – KDOT implements several BMPs to maintain clean facilities. Chemicals in storage are inventoried annually. Salt storage is under roof. Salt/Sand mix is stored under a tarped structure. The residue from the mixing is broomed up and added to the pile. Staff is trained annually on the Spill Prevention, Controls and Countermeasure plan. Records of attendees are on file with the Safety officers. Equipment is washed in the wash-bay. The wash-bays are properly equipped with sediment traps that are connected to a sanitary sewer system. KDOT also conducts multiple cycles of street sweeping throughout the year.

KDOT by policy and practice does not allow any discharges which produce Fecal Coliform Bacteria on KDOT right-of-way and illegal sources are identified and removed.

Nutrient/BOD and siltation which could result from KDOT construction activities are subject to the requirements of plans and special provision included in the contract documents. A Storm Water Pollution Prevention Plan (SWPPP) is part of every construction project.

Pesticide application always conforms to the manufactures recommendation and the minimum amount necessary is applied.

2. KDOT is working to implement the BMPs set forth in the Storm Water Management Plan. While it is common knowledge that good housekeeping will minimize the spread of contaminates, it is not evident through the stormwater sampling that KDOT contributes to any significant water pollution. KDOT's practice of maintaining 70% vegetation in the ditches and right-of-way is working as intended to hold the soil in place, thus reducing the contribution of sediment in the stormwater.
3. The Total Maximum Daily Loads (TMDL) water monitoring results are uploaded to the electronic discharge monitoring report eDMR system. KDOT was able to collect 3 sets of Stormwater sample data in 2017. There was insufficient rainfall in the 4<sup>th</sup> quarter, thus no stormwater sampling was possible.

The following is a discussion of the results from the 3 sets of stormwater samples for the Manhattan Area.

The Kjeldahl Nitrogen (KN), nitrogen and nitrite concentration had minimal change in the downstream samples. No change was found in some samples and a decrease in other downstream samples. There was a slight increase in a few downstream samples. The increase was from 0.02 to 0.1, which is less than or equal to the minimum reporting level (MRL).

The Ortho-phosphate concentration shows a decrease to a slight increase in the downstream samples. The concentration in both sets of samples was less than 1. The increase ranged from 0.01 to 0.03 which is below 0.05 MRL.

## MS4 2017 Annual Report

The turbidity and total suspended solids (TSS) are virtually unchanged from the upstream sample to the downstream sample. In some samples there is a decrease in turbidity and TSS. The increase in TSS is less than 10 mg/l, which is within the 10mg/l MRL.

The bacteria count for the March sample taken on the K-177 seems out of ranch when compared to the upstream sample and the June and August samples. KDOT is not seeing a significant jump of bacteria in the downstream sample.

According to the data, KDOT appears not to be a significant contributor to stormwater pollution.

4. KDOT plans to continue the BMPs we have in place as stated in our Stormwater Management Plan. KDOT will publish its Stormwater Information brochure and further implement our awareness/illicit discharge/good housekeeping training for our maintenance staff.
5. KDOT is responsible for the implementation of our Stormwater Management Plan (SMP). We have not shared/assigned that responsibility with any municipality or contractor.

## 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
  - 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
  - h. A map of surface water sampling locations with an information table is to be attached with this report (if surface water monitoring is required by the permit). An example map and table is included with this report to illustrate the preferred method of completion.

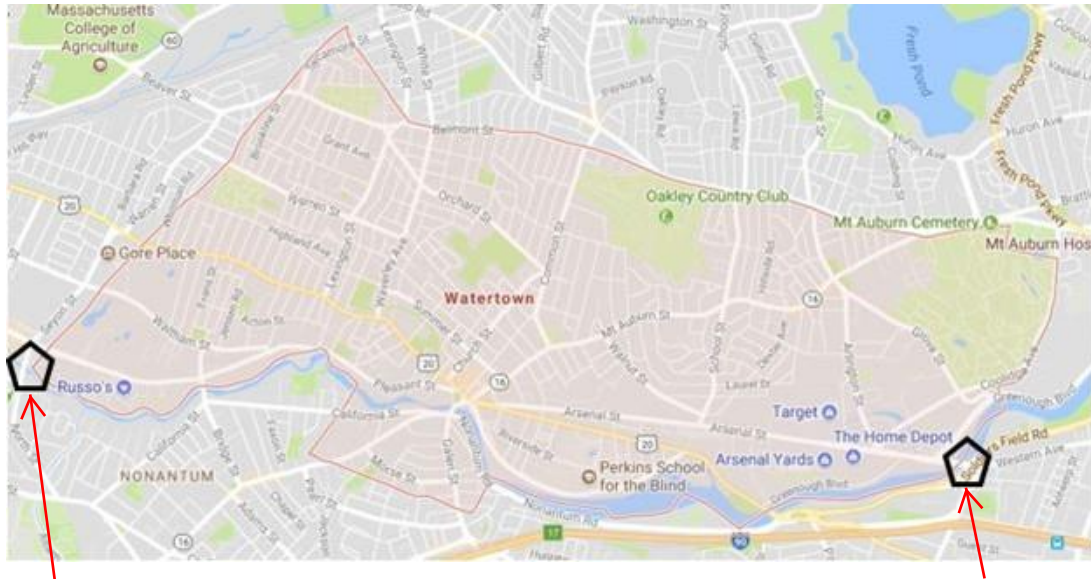
Issues which may be addressed include:

- a. Are the BMPs appropriate for the 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 review 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.

### 6. TMDL Surface Water Monitoring Locations

- a. Some permittees are required to monitor surface waters if the permit includes TMDL monitoring requirements for Specific Impaired Stream or Lake to Target within Part II of the permit.

Example Map and Table Below - Please fill out map and table on next page and adjust as needed

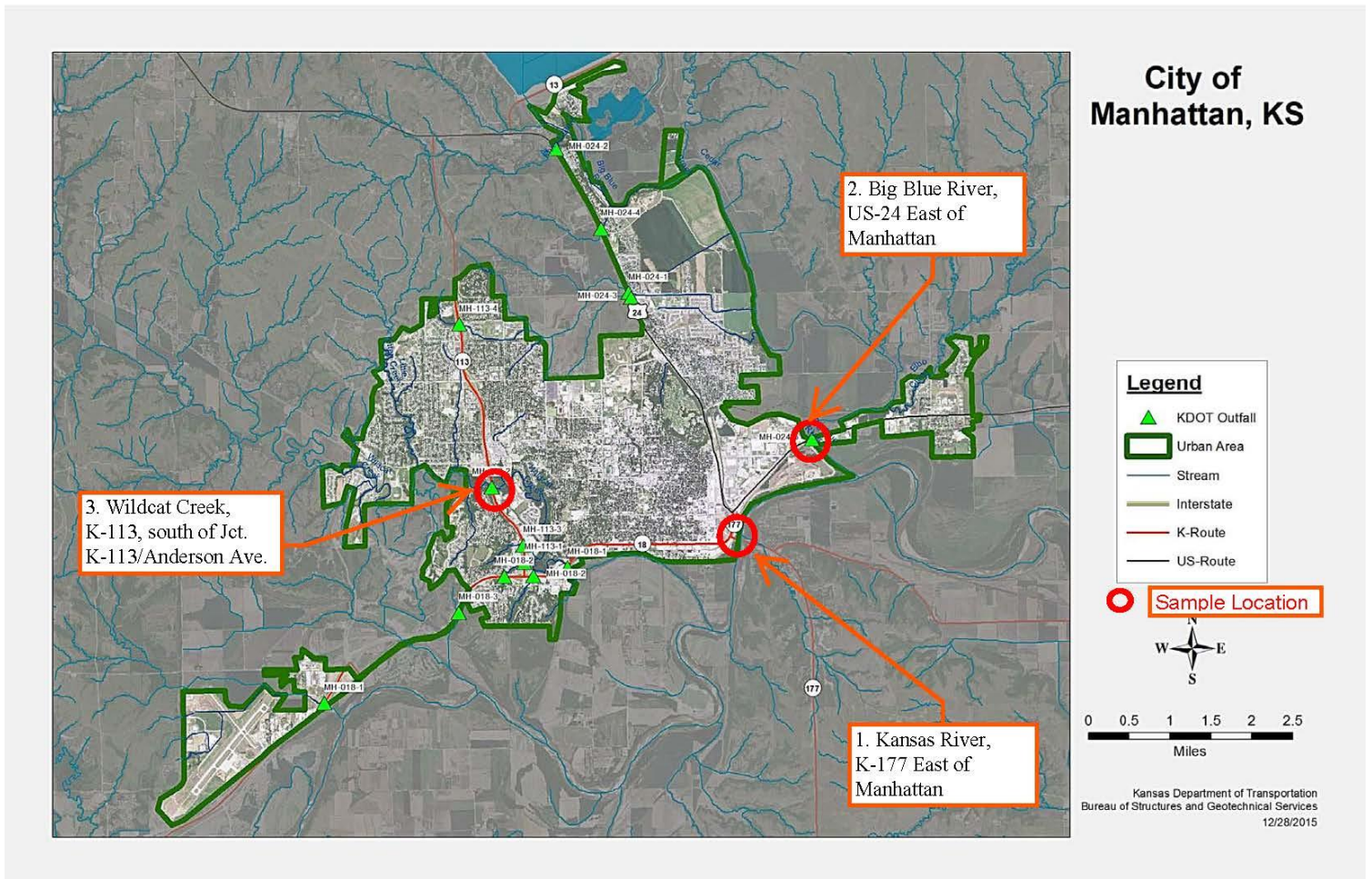


Upstream Site: Farwell Street Bridge over Charles River

Downstream Site: Arsenal Street Bridge over Charles River

Local Site Name	Farwell	Arsenal	
Local Site Identifier	C1	C2	
Sample Location Description	On the east side of this bridge is a pedestrian walkway where a rope and bucket is lowered to the middle of the river to obtain a sample.	From the bike path on the southeast end of the bridge a path extends down to the bank of the river. A 10 foot long sample pole with bucket at the end is used to reach out past littoral vegetation and obtain a sample	
KDHE EDMR Code if Known	Far2002C6	Arse1001C6	
Lat. & Lon Data Decimal-Degree Format			
Lat.	42.367056 °	42358910 °	
Lon.	-71.218089 °	-71161087 °	

Map – Click image to upload and mark surface water monitoring locations and identify the sites:





\*Please clearly label upstream and downstream sites

Fill out table with your site names and information (attach additional pages if necessary):

Local Site Name	Kansas River, K-177 East of Manhattan	Big Blue River, US-24 East of Manhattan	Wildcat Creek, K-113 s. of Jct. K-113/Anderson Ave.
Local Site Identifier	M1	M2	M3
Sample Location Description	Turn south on McDowell Creek road, then pull into the parking area on the west side of the road. Walk in under the bridge to pull water samples with jar tied to a rope.	Pull in to the parking area on the southside of the EB lane. Walk under the bridge to pull the water sample. Pull sample with jar tied to a rope.	Park in the Anderson Shopping center. Walk on the walking Linear Trail to the east. Pull the water samples with a jar tied to a rope. The downstream sample will be east of the railroad trestle and the upstream sample will be west of K-113 bridge.
KDHE EDMR Code if Know	KR177001	BBR24002	WC113003
Lat. & Lon. Data Decimal - Degree Format			
Lat.	39.174544	39.192086	39.184667
Long.	-96.553524	-96.538571	-96.610717





**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:  Date Signed: 3-15-2018  
(Legally responsible person)

Name (printed): W. Clay Adams Title: Bureau Chief of Maintenance

**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