

KANSAS STORMWATER 2018 ANNUAL REPORT FORM FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

Please place an "X" in the left box if any information has changed from previous years

<input type="checkbox"/>	Permittee [Agency Name] Mailing Address 1:	Unified Government of Wyandotte County/ Kansas City, Kansas
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<input type="checkbox"/>	State:	Kansas
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<input type="checkbox"/>	Kansas Permit Number: — Ex. M-MC21-SU01	M-MO25-SO01

Reporting Period covers activities from January 1, 2018 through December 31, 2018.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2019. This annual report must be submitted as a PDF file to KDHE on a standard compact disk (CD) or digital versatile disk (DVD).

IN ADDITION, provide the following:

1. A current copy of the Stormwater Management Program (SMP) Document as a PDF file on the CD or DVD.
2. Include at the end of this annual report a section which provides a final report on effectiveness of source controls and structural BMPs to achieve the measurable goals and summarize water quality data from selected monitoring sites. The water quality data should be evaluated for trends over the years of monitoring.
3. Any new stormwater ordinances or revised ordinances which have not already been submitted to KDHE for review/retention.

This template annual report document (basic report) for the 2018 reporting period has changed from the annual report format used in previous years. This year's document focuses on the core aspects of permit requirements including the Stormwater Management Program, the Six Minimum Control Measures (Public Education and Outreach, Public Involvement and Participation, Illicit Discharge

Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management in New Development and Redevelopment Projects, and Pollution Prevention/Good Housekeeping for Municipal Operations), Total Maximum Daily Load (TMDL) Best Management Practices and TMDL wet weather monitoring. Additionally, for Phase I permittees a program to monitor listed industrial facilities is required. Although any failure to comply with a requirement of the MS4 NPDES permit may expose the permittee to enforcement action by either the permitting authority (Kansas Department of Health and Environment) or by the Environmental Protection Agency, the failure to implement the core aspects of the permit likely increases the risk of not only enforcement but also of incurring a monetary penalty.

The permittee is well advised to accurately report the conditions and status of their stormwater program and give due consideration of improving or enhancing their program where it is weak, or deficient in any of the core aspects.

MS4 SIX MINIMUM CONTROL MEASURES FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4'S) WITH NPDES PERMITS (MS4)

The following outlines the NPDES permit requirements for implementation of the Six Minimum Control Measures as required under Kansas MS4 permits issued by the KDHE. The NPDES permit provided to the MS4 authority should be reviewed for additional requirements associated with implementation of the Six Minimum Control Measures such as deadlines for the implementation of the requirements or supplemental requirements associated with the individual measures. The general requirements are as follows:

A. Six Minimum Controls — The permittee shall develop and implement Best Management Practices (BMP's) with measurable goals for each of the six minimum control measures. The six minimum control measures and associated requirements are listed and explained as follows:

1. *Public Education and Outreach*

The permittee shall implement a public education program which includes distribution of educational materials to the community or conducting equivalent outreach activities which address the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

2. *Public Involvement and Participation*

The permittee shall implement a public involvement and participation program to solicit public comment and recommendations regarding the BMP's and measurable goals utilized by the permittee to comply with the permit. The permittee shall comply with state and local public notice requirements when implementing a public involvement and participation program.

3. Illicit Discharge Detection and Elimination

The permittee shall:

- a. develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4;
- b. Develop a storm sewer system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a CD or DVD.
- c. Enact ordinances or resolutions to prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions if the permittee has such authority. A copy of the ordinances or resolutions shall be submitted to KDHE.
- d. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and
- e. Develop and implement a plan to detect and address prohibited non-stormwater discharges, including but not limited to illegal dumping, to the storm sewer system. Unless identified by either the permittee or KDHE as a significant source of pollutants to waters of the state, the following examples of non-stormwater discharges are not prohibited from entering the MS4:

- | | |
|---|--|
| 1. Water line flushing | activities |
| 2. Diverted stream flow | 17. Flows from riparian habits and wetlands |
| 3. Rising groundwaters | 18. Dechlorinated swimming pool discharges excluding filter backwash |
| 4. Uncontaminated groundwater infiltration as defined under 40 CFR 35.2005(20) to separate storm sewers | 19. Street wash waters (excluding street sweepings which have been removed from the street) |
| 5. Uncontaminated pumped groundwater | 20. Discharges of flows from firefighting activities |
| 6. Contaminated groundwater if authorized by KDHE and approved by the municipality | 21. Heat pump discharge waters (residential only) |
| 7. Discharges from potable water sources | 22. Treated wastewater meeting requirements of a NPDES permit |
| 8. Foundation drains | 23. Sump pump drains |
| 9. Air conditioning condensate | 24. Other discharges determined not to be a significant source of pollutants to waters of the state, a public health hazard, or a nuisance |
| 10. Irrigation waters | |
| 11. Springs | |
| 12. Water from crawl space pumps | |
| 13. Footing drains | |
| 14. Lawn watering | |
| 15. Individual residential car washing | |
| 16. Occasional not-for-profit car wash | |

4. Construction Site Stormwater Runoff Control

The permittee shall develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation, at a minimum, of the following:

- a. Permittees which have the authority to enact ordinances or resolutions shall enact such ordinances or resolutions to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and Local law;
- b. Requirements for construction site owners or operators to implement appropriate erosion and sediment control best management practices;
- c. Requirements for construction site owners or operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that are likely to cause adverse impacts to water quality;
- d. Procedures for site plan review which incorporate consideration of potential water quality impacts;
- e. Procedures for receipt and consideration of information submitted by the public;
- f. Procedures for site inspection and enforcement of control measures.

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

The permittee shall develop, implement, and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development and implementation, at a minimum of the following:

- a. BMP's to prevent or minimize adverse water quality impacts;
- b. Strategies which include a combination of structural and/or non-structural BMP's appropriate for the municipality;
- c. For permittees which have the authority, ordinances or resolutions to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law;
- d. Ensure adequate long-term operation and maintenance of BMP's

6. *Pollution Prevention/Good Housekeeping for Municipal Operations*

The permittee shall develop and implement an operation and maintenance program that includes employee training to prevent and reduce stormwater pollution from municipal operations activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

HIGHLIGHTS AND CHALLENGES

Introduction: Stormwater Management Plan. The UG's Stormwater Management Plan (SMP) was revised, in accordance with the new permit (issued with an effective date of January 1, 2016), in 2016 and submitted to the KDHE and the EPA on February 27, 2016. Consistent with the Partial Consent Decree, the UG chose to retain the original SMP (including BMPs, measurable goals and intent) through 2017, and made changes to address the requirements of the new permit. Per the new permit, the UG also revised the SMP in February 2017 to incorporate new permit requirements from Part I.E (TMDL Regulated Pollutants section). Further details concerning the 2016 and 2017 revisions can be found in the 2015 Annual Report or 2016 or 2017 Revised SMP.

The UG's Stormwater Management Program continued to improve in 2018, due in large part to refinement of the individual programs based on experiences from previous years. UG personnel within the Program have grown and matured. The UG believes that through adaptive management, the Program is making reasonable progress toward achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable. Below are a summary of the Highlights and Challenges.

Highlights. The UG has a strong Public Education Program and continues to comply with its SMP. In 2017, the UG piloted a program/contest for school age children to learn about an aspect of Stormwater Quality and create a Public Service Announcement based on what they learned. These were then judged, and the winning selection was then broadcast on the UGTV. This has been very popular with kids and was repeated in 2018.

UG's Public Education team was selected to present at Water Environment Federation's Technical Exhibition and Conference (WEFTEC). WEFTEC is the largest annual water quality event in the world. Their presentation on the Public Education and Outreach the UG engages in Wyandotte County was selected for presentation at the conference.

In 2018, the UG staff spent significant time improving the GIS database so they can use the Lucity Stormwater Modules to better track and document MS4 tasks. This was a huge effort and required coordination among staff responsible for various aspects of the Program. The improvements and use of modules now allows UG staff to inspect Major Outfalls on a tablet.

Prior to 2018, the UG had consultants to assist in performing and documenting the MS4 program. As the staffing and programs have matured, the UG has been able to assign individual staff to perform duties previously done by consultants. In 2018, the UG took full control of the Major Outfall Inspections, Post-Construction and Industrial Stormwater Programs.

The Construction Site Stormwater Program continues to exceed expectations as the Stormwater Inspector continues to gain experience to allow him to identify problematic issues on active construction sites and communicate those issues both to site operators

and up the chain to UG stormwater management. In addition, his relationship with contractors is allowing better communication, coordination, and improving the cleanliness of construction sites.

Lastly, this was the second year the Water Pollution Control Department implemented the revised Wet Weather sampling program. It was a very successful year obtaining samples. All stream samples were obtained despite drought conditions in the late summer and early fall.

Challenges. In the past, the UG has typically aired three to four Stormwater related PSAs throughout the year. However, the UG's PSAs were inadvertently not aired in 2018 due to communication issues between Stormwater Program staff and UGTV staff. . The Stormwater Program staff are taking steps to ensure that the UGTV staff is aware of the importance of airing the PSAs on a regular schedule during 2019.

As noted above, the region experienced drought conditions in late summer to early fall. This made sampling difficult in the Wyandotte County Lake, as there were few, if any, storm events (defined by the permit as a 24-hour rain event of greater than or equal to 0.50 inches) during the summer (defined by the permit as between July 1 and October 31) time period. As a result, the UG was unable to obtain one set of wet weather samples from the Lake.

Lastly, the UG will be providing training under BMP 4.D to local construction site owners, contractors, site operators, and installers in 2019, as reported below. This will be similar to training provided in 2016. It does appear, however, that training did not occur in 2018. As a result, the UG will schedule the training session for early in 2019 to reestablish a biennial approach.

B. Stormwater Management Program

Please place an “X” in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the Stormwater Management Program (SMP) been developed and implemented?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has the SMP been modified or updated during this reporting period?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the answer to question 2 above was “yes,” has the modified SMP been submitted to KDHE for review?

If the answer to item 3 is a “NO,” a copy of the updated 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 BMP’s and/or revised goals to avoid being in a position of non-compliance. However; reasonable BMP’s with reasonable goals must be implemented or KDHE may require the permittee to modify the SMP to include additional or better BMP’s and/or more reasonable goals.

B. Stormwater Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
10.A	Hire a Stormwater Coordinator.	10.A.1 - Create a new position of Stormwater Coordinator.	Completed in 2012
		10.A.2 - Fill the Stormwater Coordinator position.	The UG has an employee currently filling in as acting Stormwater Coordinator. In 2019 the UG will advertise to hire a permanent Coordinator.
10.B	Create Stormwater Executive Committee to Provide Administrative Oversight, Coordination and Direction.	10.B.1 - Form Stormwater Executive Committee and conduct meeting.	Completed in 2013
		10.B.2 - Stormwater Executive Committee to consider formation of other committees as needed.	Committees deemed unnecessary at this time.
		10.B.3 - Prepare Executive Committee meeting minutes.	An Executive Committee Meeting was held on December 19. Minutes are available upon request.
10.C	Conduct an Annual Financial Analysis of the Stormwater Program.	10.C.1 - Conduct an annual analysis of the program's funding and expenses.	Completed in 2018.
		10.C.2 - Include a copy of the financial analysis in the Annual Report.	A summary of the financial analysis and proposed budget can be found in Appendix 10.C.

C. Total Maximum Daily Load (TMDL) Best Management Practices

C. Total Maximum Daily Load (TMDL) Best Management Practices (BMP's)

Some permittees are required to implement BMPs to reduce the discharge of listed TMDL regulated pollutants (potentially any or all of the following pollutants – bacteria, nutrients, and sediment)

Please place an “X” in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Were any BMP's 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	List all BMP's intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information in the following table.

List all the TMDL BMPs as identified in the SMP and provide the requested information in the following table.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.A	Develop and Implement BMPs to Reduce TMDL Regulated Pollutants (Bacteria), to the Maximum Extent Practicable, from Entering the Kansas River.	Bacteria	8.A.1 - Implement BMPs by distributing pet waste brochures, regulating septic systems, and focus IDDE Major Outfall inspection program within Kansas River basin.	Completed.
			8.A.2 - Include all reports and activities in the Annual Report.	Completed. See Appendix 8.A.
8.B	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Nutrients	8.B.1 - Develop baseline report of existing conditions surrounding the lake.	Completed in 2013.
			8.B.2 - Gather and analyze tributary samples taken four times per year.	All required samples were obtained and analyzed for each location. See Appendix 9.C for summary.
			8.B.3 - Place high priority on sites surrounding the lake when enforcing E&SC and post-construction elements.	Ongoing effort.
			8.B.4 - Conduct a follow-up bathymetric survey of lake. (2017)	Completed in 2017.
			8.B.5 – Take Secchi Disk Readings at up to three locations, one week prior to Memorial Day,	Completed. See Appendix 8.B

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.B (Continued)	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Nutrients	Independence Day, Labor Day. 8.B.6 – Develop plan to determine significant sources of phosphorus entering lake.	Completed. A technical memorandum was prepared which summarized results of the assessment in 2017.
			8.B.7 – Implement plan developed in 8.B.6.	Completed. Plan is to continue monitoring WYCO Lake.
			8.B.8 – Compose a technical memorandum pertaining to 8.B.6 and 8.B.7 and recommendations.	2019 Task.
8.C	Develop and Implement BMPs focused on the Little Turkey Creek (LTC) and Brenner Heights Creek (BHC) Watersheds as proxies for the Kansas River.	Nutrients, Sediment and Bacteria	8.C.1 – Distribute pet waste brochures to be displayed at parks and/or other UG owned facilities located within the LTC and BHC watersheds.	Completed. Brochures are available at the West Wyandotte Library (LTC watershed) and Parks and Recreation (BHC watershed). See Appendix 1.A.
			8.C.2 - Distribute leaf litter related brochures to be displayed at parks and/or other UG owned facilities located within the LTC and BHC watersheds.	Completed. Brochures are available at the West Wyandotte Library (LTC watershed) and Parks and Recreation (BHC watershed). See Appendix 1.A.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.C (continued)			8.C.3 – Perform dry weather major outfall inspections focused on LTC and BHC watersheds.	Completed in 2017.
			8.C.4 – Install and maintain Pet Waste stations in parks within LTC and BHC watersheds if deemed necessary.	An effort to install new pet waste stations in parks within the two watersheds are part of the budget for 2019.
8.D	Assess BMPs Focused on LTC and BHC Watersheds Targets as proxies for Kansas River.	Nutrients, Sediment and Bacteria	8.D.1 – Summary of assessment of potential pollutants within LTC and BHC watersheds	Completed in 2017.
			8.D.2 – Provide summary of preliminary assessment of LTC and BHC watersheds based on 2016 and 2017 wet weather sample results. Recommend BMPs if deemed necessary.	Completed. The preliminary assessment found pollutant loadings to be typical for Wyandotte County watersheds. A summary of the preliminary assessment is provided in section Summary of Water Quality Results (p.50).
			8.D.3 – Implement any BMPs identified in 8.D.2.	2019 Task.

C. Total Maximum Daily Load (TMDL) – Wet Weather Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
9.A	Implement SOPs to Address Monitoring of TMDL Regulated Pollutants.	9.A.1 - Implement existing wet weather monitoring SOPs.	Completed in 2013.
		9.A.2 - Review and update, if needed, any SOPs.	Completed in 2014.
		9.A.3 - Provide copy of updated Monitoring Plan and data analysis procedures in the Annual Report.	Completed. Revisions were not deemed necessary.
		9.A.4 – Review in 2016 SOPs for monitoring and data analysis and modify if necessary.	Completed in 2016.
9.B	Develop Tracking System for Wet Weather Monitoring Activities	9.B.1 - Develop spreadsheet to track the water quality results.	Completed in 2013.

C. Total Maximum Daily Load (TMDL) – Wet Weather Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
9.C	Conduct Water Quality Analyses of SW Discharges to Assess Effectiveness of Implemented BMPs and Stormwater Pollution Prevention Actions.	9.C.1 – Annually prepare memorandum on analyses results.	Completed. Summary of results is located in Appendix 9.C.
		9.C.2 - Provide copy of data analysis in the Annual Report.	Completed. See Appendix 9.C.
		9.C.3 – Continue analyzing samples gathered at (2016) active locations.	Completed in 2016.
		9.C.4 – Begin analyzing in 2017, samples at locations determined in 9.D.1.	Completed. See Appendix 9.C for summary of the analysis results.
9.D	Perform sampling activities at Wet Weather Monitoring Sites.	9.D.1 – Conduct an assessment in (2016) of current monitoring locations and determine future locations.	Completed in 2016.
		9.D.2 – Gather samples at the six (2016) locations.	Completed in 2016.
		9.D.3 – Begin analyzing in 2017 samples at 8 locations determined in 9.D.1.	Completed. Summary of results is located in Appendix 9.C.

E. Stormwater Management Program Requirements (Six Minimum Controls)

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.A	Gather and Distribute Printed Stormwater Educational Materials.	1.A.1 - Purchase copies of selected SW flyers.	Completed. Over 475 flyers of various messages were distributed to multiple locations. See Appendix 1.A.
		1.A.2 – Place flyers in various public locations.	Completed. See Appendix 1.A.
		1.A.3 – The UG shall continue to prepare envelope inserts designed educate the general public on several of the key elements of the SMP. Insert shall be bilingual.	Completed. A bilingual Board of Public Utilities bill insert was created and covered the topic of household Hazardous Waste. See Appendix 1.A.
		1.A.4 – Distribute envelope inserts in water bills.	Completed. See Appendix 1.A for Summary.
		1.A.5 – Replenish flyers at targeted locations.	Completed. See Appendix 1.A for locations.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.B	Deliver Televised Programs/Announcements on Stormwater Management/Surface Water Quality/How to Reduce Pollutants to the Storm Sewer System on UG's Cable Channel.	1.B.1 – Research preparing or obtaining 3rd party license for a Public Service Announcement (PSA).	Completed in 2014.
		1.B.2 – Prepare or obtain 3rd Party Public Service Announcement.	Completed in 2014.
		1.B.3 – Air PSA at least four times per year.	The UG's PSAs were not aired in 2018 due to communication issues between Stormwater Program staff and UGTV staff. The Stormwater Program staff are taking steps to ensure that the UGTV staff is aware of the importance of airing the PSAs on a regular schedule during 2019. See Appendix 1.B
		1.B.4 – Annually review PSA and modify as needed.	Completed. PSAs were reviewed, and UG is satisfied with the content and message of the PSAs.
1.C	Enhance Existing Website to Provide Information of Stormwater Issues.	1.C.1 – Include copy of approved SMP.	Completed. See Appendix 1.C.
		1.C.2 – Copy of Annual Report placed on website within 30 days of submitting the Annual Report to KDHE.	Completed. See Appendix 1.C.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.D	Contribute Financially to Local Agencies within Wyandotte County Who Promote SW Management Improvements.	1.D.1 – Annual contribution to Wyandotte County Conservation District (WCCD).	Completed. Contributed \$45,000 to WCCD in 2018. A summary of the WCCD 2018 activities is located in Appendix 1.D.
1.E	Contribute Financially to Regional Agencies Who Promote SW Education and Management Improvements.	1.E.1 – Annual membership and contribution to Mid-America Regional Council (MARC).	Completed. Paid \$20,000 in dues for the MARC Committee. Active in MARC Water Quality Education Committee and Co-Chair of Education Sub-Committee. See Appendix 1.E.

1. Public Education and Outreach (Table)

1.F	Utilize Local Newsletters for Education of SW Related Issues.	1.F.1 – Submit one article per year in Livable Neighborhoods newsletter.	Completed. The UG submitted seven (7) articles that were published in both the Livable Neighborhoods monthly newsletter and weekly e-newsletter to over 5,000 recipients. See Appendix 1.F for subject of and summary of articles published and a sample article.
BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.F (continued)	Utilize Local Newsletters for Education of SW Related Issues. Cont.	1.F.2 – Submit at least three (3) articles for publication in the UG's Weekly E-news.	Completed. Thirteen (13) articles were included in the UG's Weekly E-News newsletter that has approximately 3,000 subscribers. See Appendix 1.F summary of articles published and a sample article.
1.G	Annual Review of Media Used for Public Outreach.	1.G.1 – Annually review media outlets used for public outreach efforts.	Completed. Will continue to use UG E-news, Facebook, Twitter, UG-TV, Liveable Neighborhoods, Nextdoor and website. See Appendix 1.G.

1. Public Education and Outreach (Table)

1.H	Create and maintain a Stormwater Speaker Bureau.	1.H.1 - In 2018 the UG will begin operation of the Stormwater Speaker Bureau with the intent of speaking at 8 events per year.	Completed. Created a Stormwater Speaker Bureau with various topics and speakers concerning stormwater topics. No requests for speaker engagements in 2018. See Appendix 1.H.
		1.H.2 - Solicit topics for Stormwater Speaker Bureau.	Presented the information at the Liveable Neighborhoods meeting and advertised it on the UG Stormwater website. See Appendix 1.H.
BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.I	Conduct Outreach to Natural Stream Owners.	1.I.1 – Identify in 2018 and evaluate the extent of natural streams within the MS4 area.	Completed. A technical memorandum was completed and is available upon request. The memorandum identifies a very small (0.75%) percentage of streams that are untouched by human influence in Wyandotte County. See Appendix 1.I

1. Public Education and Outreach (Table)

		1.1.2 –Conduct in 2019 at least one outreach activity to select land owners to provide information about activities that land owners can take to enhance and protect natural streams and enlist the Parks and Recreation department.	2019 Task.
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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.A	Create a Stormwater Quality Education Grant Program.	2.A.1 - Prepare criteria for a SW Quality education grant program.	Completed in 2014.
		2.A.2 – Promote the grant program to local teachers/schools/districts/non-profits via various media outlets.	Completed. The grant program was advertised through the UG eNews, website, social media (Facebook, Twitter), Liveable Neighborhoods, School Districts and email.
		2.A.3 – Provide copy of criteria and applications for selected projects in Annual Report.	Completed. See Appendix 2.A.
2.B	Promote and Implement Community Cleanup Programs.	2.B.1 – Partner with Operations Brightside and other neighborhood organizations to facilitate annual cleanups.	Completed. Continued partnership with Operation Brightside and Livable Neighborhoods for neighborhood cleanups. A summary of cleanup activities can be found in Appendix 2.B.

2. Public Involvement and Participation (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
2.C	Provide Assistance and Materials to Community Groups for participation in a Storm Drain Inlets Stenciling Program.	2.C.1 – Advertise the availability of a Storm Drain Stewardship Brochure.	Completed. Copy of the brochure was made available on the UG’s website and distributed to all the sites where other brochures were placed. A UG inlet stenciling flier was also distributed at neighborhood group meetings and on the UG webpage.
		2.C.2 – Provide materials and areas for stenciling to participating groups.	Completed. Inlet markers, door hangers, and other application supplies were made available for volunteer groups to use.
		2.C.3 – All storm drainage inlet castings manufactured w/ "Exits to River, Do Not Dump Waste".	Completed. All storm inlet castings are specified to have the required statement.
		2.C.4 – Document the number and name of groups, the number of inlets stenciled and number of brochures distributed.	Completed. The UG provided supplies for volunteers to do inlet stenciling at Turner High School as part of their grant. List of events, number of groups and name of each group, approximate number of inlets marked, and approximate number of brochures distributed can be found in Appendix 2.C

3. Illicit Discharge Detection and Elimination

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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? *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit may require the permittee enact ordinances, or resolutions. Have ordinances, or resolutions, or regulations to prohibit non-stormwater discharges into the storm sewer system been enacted? Effective date: 06/02/05
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Have the ordinances, resolutions, or regulations been modified? Effective date:

List all the Illicit Discharge Detection and Elimination BMPs as identified in the SMP and provide the requested information in the following table

* The UG prepared a map that identifies Major Outfalls and receiving water bodies as described in the MS4 Permit and the UG SMP. The UG is in compliance with both.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.A	Evaluate, and if Necessary, Update Ordinances that pertain to Illicit Discharges.	3.A.1 – Prepare Memorandum regarding current ability of ordinances to perform IDDE inspections and take enforcement action.	Completed in 2013.
		3.A.2 – Legal Authority contained in Chapter 30 of UG's current Municipal Code of Ordinances included in Annual Report.	Completed in 2013.
3.B	Implement, & Revise if Needed, Standard Operating Procedures for Illicit Discharge Detection, Sampling, Tracking and Enforcement.	3.B.1 – Implement applicable existing Standard Operating Procedures (SOPs).	Completed in 2013.
		3.B.2 – Review and update if appropriate, all IDDE Program SOPs.	Completed in 2014.
		3.B.3 – Provide any updated SOPs in Annual Report.	Minor revisions were made to the SOPs. See Appendix 3.B.
		3.B.4 – Perform a review in 2018 of outfall inspection, dry weather sampling, inspection and tracking, and enforcement SOPs. Prepare a memo with results of review.	Completed. A review was performed by the WPC Department. Minor revisions were made. See Appendix 3.B.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.C	Design, Implement and Maintain IDDE Program Tracking and Reporting System.	3.C.1 – Review maps and prepare list of major outfalls.	Completed in 2013.
		3.C.2 – Continue tracking of outfall inspections and dry weather sampling.	Completed. See Appendix D-3.C.
		3.C.3 – Continue illicit discharge detection, tracking and enforcement activities.	Completed. One (1) suspected illicit discharges was investigated. The source was identified as likely being a water main leak. The situation was reported to BPU Water. See Appendix 3.E.
		3.C.4 – Amend current stormwater maps to distinguish major outfalls from other nodes/outfalls.	Completed in 2014.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.D	Provide Training for IDDE Inspection Staff	3.D.1 – Conduct training session for key UG employees on identification of illicit discharges.	Training was held for staff of Water Pollution Control, Sewer Maintenance, Pump Maintenance, Parks Department, Building Codes & Inspections, Streets, Engineering, and Engineering Inspectors.
		3.D.2 – Provide in-house or commercial training for persons assigned to inspect, sample and track illicit discharges.	A half-day training on Stormwater topics, including IDDE, as well as a 3-day Certified Stormwater Inspector Training was held in November 2018. See Appendix 3.D
		3.D.3 – Provide copy of training materials and attendance sheet in Annual Report.	See Appendix 3.D.
3.E	Perform Dry Weather Screening of Stormwater Outfalls.	3.E.1 – Conduct at least 125 non-exclusive dry weather inspections per year of major outfalls.	Completed. 129 major outfalls were inspected. No suspected illicit discharges were identified. See Appendix 3.E.
		3.E.2 – Evaluate the effectiveness of the outfall inspection program every 5th year (2017).	Completed in 2017.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.E (continued)	Perform Dry Weather Screening of Stormwater Outfalls.	3.E.3 – Provide list of all inspected outfalls, illicit discharges detected, types of illicit discharges discovered and how, any discharges that were eliminated, and enforcement action.	See Appendix 3.E.
3.F	Implement Program to Televis and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	3.F.1 – Televis and review storm sewers CCTV information for illicit discharges and follow IDDE SOPs for any found illicit discharges.	Completed. See Appendix 3.F.
		3.F.2 – Televis 20,000 feet of sanitary sewers and review CCTV information for cross connections and follow IDDE SOPs for any found illicit discharges.	Completed. Televised 322,149 ft. of combined, storm and sanitary sewer in 2017. See Appendix 3.F.
		3.F.3 – Review 20,000 feet per year of previously collected storm and sanitary sewer CCTV inspection videos to discover any illicit discharges/cross connections.	The UG continues to review old tapes as part of the Sanitary Sewer Rehabilitation and Repair Project and for Emergency and Spot repairs. Estimates of over 20,000 ft. of sewer was reviewed as part of this work.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.F (continued)	Implement Program to Televise and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	3.F.4 – Provide a summary report including the number of linear feet of storm and sanitary sewer lines televised and number of illicit discharges or cross-connections that were detected and eliminated in Annual Report.	Completed. See Appendix 3.F.
3.G	Maintain a Current Storm Sewer Mapping System.	3.G.1 – Convert all existing AutoCAD MS4 maps to a new GIS.	Completed in 2015
		3.G.2 – Annually update GIS maps from record drawings.	Completed. See Appendix 3.G.
3.H	Continue the UG's Existing Household Hazardous Waste Collection Program.	3.H.1 – Coordinate seven (7) HHW collection days every year.	Completed. Seven (7) events were held. Additionally, two (2) events were held for residents to drop off electronic waste. See Appendix 3.H.
		3.H.2 – Estimate amount of material collected at each event and list in the Annual Report.	Completed. 46.6 tons of household hazardous waste and 37.7 tons of electronics were collected. See Appendix 3.H.
		3.H.3 – Continue program to collect and dispose of abandoned tires.	Completed. 9,271 tires were collected by Street Maintenance Dept. See Appendix 3.H.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.1	Engage commercial facilities that have potential to contribute pollutants to the MS4.	3.1.1 – Assess in 2018 the types of commercial facilities that may contribute pollutants to the MS4, assess level of effort and potential rewards in outreach to commercial facilities, and prepare a technical memorandum detailing the efforts necessary, results, and recommendations	A draft technical memorandum was prepared in 2018. To summarize, the memo identified potential commercial facilities to reach out to.
		3.1.2 – Select in 2018 and 2019 a group of commercial facilities to engage.	. The UG is considering the potential impact on the UG’s MS4 and will make a decision in 2019 on commercial properties for outreach and methods. See Appendix 3.I

4. Construction Site Stormwater Runoff Control

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development/redevelopment projects been enacted? Effective date:12/14/06
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed for the receipt and consideration of information submitted by the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?

List all the construction site stormwater runoff control BMP's 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.A	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	4.A.1 – Implement applicable SOPs.	The UG began implementing in 2013.
		4.A.2 – Review and update, if appropriate, all Construction Site Program SOPs.	Completed in 2014.
		4.A.3 – Provide any updated SOPs in Annual Report.	Minor revisions were made to the SOPs. See Appendix 4.A.
		4.A.4 – Review in 2019 the SOPs for stormwater plan review, site inspections, and enforcement, prepare a technical memorandum detailing the results of the review, and modify SOPs if necessary.	2019 Task.
4.B	Continue to Utilize Tracking System for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	4.B.1 – Continue to use existing tracking system for all program activities.	Ongoing. See Appendix 4.B.
		4.B.2 - Report on activities under this program.	Completed. The UG conducted a total of 369 inspections in 2018. 110 plans were reviewed for stormwater quality and erosion and sediment control BMPs. See Appendix 4.B.

4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.C	Provide Training to UG's Erosion & Sediment Control (E&SC) Inspection Staff.	4.C.1 - Conduct training session for key UG employees on E&SC standards every 2 years.	Training on E&SC was held in 2018 for UG staff. See Appendix 3.D.
		4.C.2 - Provide copy of table of contents of training materials and attendance sheet in Annual Report.	See Appendix 3.D.
4.D	Provide Training to Local Contractors and Owners.	4.D.1 – Sponsor a training session for local construction site owners, contractors, site operators, and installers.	2019 Task.
		4.D.2 Provide a copy of training materials and sign-in sheet in annual report.	2019 Task.
4.E	Conduct Routine Construction Site Inspections.	4.E.1 – Conduct inspection on a priority basis.	Completed.
		4.E.2 – Whenever practicable, conduct erosion control inspections within five working days of receiving complaints.	The UG has completed these types of inspections within five days.
		4.E.3 – Include a summary of inspection records in Annual Report.	Completed. See Appendix 4.E.

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

Please place an “X” in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and redevelopment projects been enacted? Effective date:5/6/10
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a post-construction stormwater runoff program been implemented?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Have post-construction sites been inspected? *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are BMP's specified to minimize adverse water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have measures been implemented to ensure adequate long-term operation and maintenance of structural BMP's? *

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.

* The UG has a Post-Construction Site Stormwater Management Program that is consistent with the UG’s SMP. Per the SMP, the UG is required to enforce annual operation and maintenance requirements for privately owned BMPs. The program is set up such that the owner is responsible for the inspection and maintenance of privately-owned post-construction facilities. The owner is required by ordinance to maintain and submit a report on maintenance and repairs to the facilities. The UG as part of it’s Construction Site Erosion and Sediment Control Inspections, inspects BMPs for compliance with plans and BMP standards.

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.A	Maintain and Make Available Local Standards for Post-Construction Stormwater BMPs.	5.A.1 – Maintain and enforce local standards for post-construction SW management BMPs and post local standards and BMPs outlined in the standards on website.	Standards are enforced and posted on the UG website under Urban Planning and Zoning/Engineering. BMPs are posted as well.
5.B	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Post-Construction Site Inspections and Enforcement Activities.	5.B.1 – Update applicable SOPs.	Completed in 2014.
		5.B.2 - Review and update, if appropriate, all Post-construction Site Program SOPs.	Completed in 2014.
		5.B.3 - Provide any updated SOPs in Annual Report.	SOPs were reviewed. No revisions were made.
		5.B.4 – Review SOPs and prepare summary memorandum.	2019 task.

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.C	Conduct BMP Site Inspections and Maintain a Tracking System for Post-Construction Sites.	5.C.1 - Maintain an inventory of existing publicly and privately owned BMPs.	Completed. See Appendix 5.C
		5.C.2 - Update tracking system for inspection and compliance.	Completed in 2013.
		5.C.3 - Conduct annual inspections of publicly owned BMPs.	Completed. Three public facilities with BMPs were inspected. See Appendix 5.C for summary.
		5.C.4 - Enforce annual operation & maintenance requirements for privately owned BMPs.	UG ordinances require private sector owners to inspect and provide a report on inspection and maintenance activities bi-annually. Twelve (12) letters were sent to owners requesting reports. See Appendix 5.C for summary.
		5.C.5 - Maintain tracking system to store BMPs inspection and enforcement activities.	Continuing to maintain and improve tracking. Lucity and GIS database are utilized for use in tracking and enforcement. See Appendix 5.C for summary.
		5.C.6 - Provide BMP Inventory list, inspection and enforcement summary in Annual Report.	Completed. See Appendix 5.C for summary.

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.D	Provide Training to UG's Post-Construction BMPs Inspection Staff.	5.D.1 - Conduct training session for key UG employees on new BMP standards.	Provided training for key UG staff on Inspection & Maintenance for BMPs. See Appendix 3.D, 5.E
		5.D.2 - Provide copy of training materials and attendance sheet in Annual Report.	Training and attendance sheet included in Appendix 3.D, 5.E.
5.E	Develop Training Program For Local Property Owners, Designers and Developers on BMPs regarding maintenance and inspections.	5.E.1 - Sponsor a training session for architects/engineers/developers/contractors and owners of SW structural BMP sites every 2 years.	A training session on Operations & Maintenance of BMPs was held on December 12. Invitations were sent to UG internal staff as well as our registry of landscapers, engineers, developers, contractors and owners.
		5.E.2 - Provide copy of training materials and attendance sheet in Annual Report.	See Appendix 5.E

6. Municipal Pollution Prevention/Housekeeping. (Table)

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee to enact a program to address pollution prevention/good housekeeping for Municipal Operations. Has such a program been enacted?

List all the municipal pollution prevention/housekeeping BMP's as identified in the SMP and provide the requested information in the following table.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.A	Implement, & Revise if Needed, SOPs for Application of Pesticides, Herbicides and Fertilizers on UG Property.	6.A.1 – Continue to implement applicable SOPs.	Completed for 2018.
		6.A.2 - Review and update, if appropriate, all PHF SOPs.	Completed in 2014.
		6.A.3 - Review and modify lawn care maintenance specifications and contracts.	Completed in 2014.
		6.A.4 - Provide any updated SOPs, most recent PHF specifications, amounts applied, and list of certified contractors in Annual Report.	SOPs were reviewed, and minor revisions were made. Summaries can be found in Appendix 6.A.
6.B	Continue to Operate the UG's Existing Vehicle Washing Facility.	6.B.1 - Continue use of existing washing facility in accordance with SOP.	The UG continues to use the vehicle washing facility located at the Fleet Maintenance Facility. The facility was used 23,761 times. SOPs were reviewed and minor revisions made. See Appendix 6.B

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.C	Implement, & Revise if Needed, UG's Tracking System for Street Sweeping. Implement SOP for Street Sweeping Activities.	6.C.1 – Implement existing SOP. Track route classification and amount of material collected on a monthly basis.	Summaries of the materials collected can be found in Appendix 6.C.
		6.C.2 - Review SOP and tracking system, prepare memorandum on results of in-depth review.	Completed in 2014.
		6.C.3 - Use existing transfer station for street sweeping materials.	The UG no longer uses 50th Street and State Ave as a transfer station for street sweepings. The current transfer station for street sweepings is located at 47th St and Orville Avenue.
		6.C.4 - Provide list of monthly dates, route classifications, total amount of material collected per month, and copy of the latest procedures in Annual Report.	Completed. See Appendix 6.C.
		6.C.5 - Provide any updated SOP in Annual Report.	The SOPs were reviewed, and minor revisions were made. The revised SOP can be found in Appendix 6.C.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.D	Provide Training to UG Employees on Good Housekeeping Activities and Information on Reducing Pollutants to the MS4.	6.D.1 - Prepare and distribute SW Pollution Prevention materials to employees via emails/website.	Completed. Pollution Prevention materials were distributed to UG employees through, social media, trainings and website.
		6.D.2 - Provide copy of all educational materials in Annual Report.	Completed. Materials can be found in Appendix 1.A, 1.C and 3.D
6.E	Continue Existing Curb Inlet Inspection and Cleaning Program.	6.E.1 - Perform approximately 5,000 curb inlet inspections per year.	Completed. 18,897 inlets/catch basins were inspected. Summary can be found in Appendix 6.E.
		6.E.2 - Continue to clean approximately 3,000 curb inlets per year.	Completed. 8,240 curb inlets/catch basins were cleaned. Summary can be found in Appendix 6.E.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.E (continued)		6.E.3 - Re-evaluate the effectiveness of current inspection and cleaning program.	Completed in 2015.
		6.E.4 - Provide summary report in Annual Report.	Completed. See Appendix 6.E.
6.F	Review & Revise if Needed, Tracking System for Curb Inlet Inspection/Cleaning Activities. Implement SOP for inlet inspections and cleaning.	6.F.1 - Implement existing SOPs.	SOPs were implemented.
		6.F.2 - Review, and update, existing tracking system, and incorporate into maintenance work order system.	Completed in 2014.
		6.F.3 - Review SOPs and prepare memorandum on results.	Completed in 2015.
		6.F.4 - Include updated SOPs in the Annual Report for the year they were updated.	The SOP was reviewed and minor revisions made. See Appendix 6.F.
		6.F.5 – Review inlet inspection and cleaning procedures and prepare a memo detailing the results. If necessary, modify SOP.	A review was performed by WPCD. Minor revisions were made to the SOP.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.G	Create UG-owned/operated or UG-operated Buildings and Facilities Inventory. Review permit coverage and SWPPPs for regulated sites.	6.G.1 - Update existing UG-owned/operated or UG-operated buildings/facilities inventory.	Completed in 2015.
		6.G.2 - Verify those sites requiring State General Permit have one/review SWPPPs.	Completed in 2014.
		6.G.3 - Take appropriate action if a UG site is not covered by current State permit.	Completed in 2015.
		6.G.4 - Provide copy of inventory, departments contacted, and action any follow up at sites in Annual Report.	Completed. Water Pollution Control Department facilities were visited. No follow ups were necessary. See Appendix 6.G.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.H	Monitor Good Housekeeping at Non-regulated UG Sites.	6.H.1 - Develop schedule to visit all non-regulated sites within 5 years.	Completed in 2014.
		6.H.2 - Continue visiting non-regulated sites and provide educational materials on good housekeeping practices.	Completed. Inspectors discussed management practices with the facility managers that can reduce pollution potential of these sites. Educational materials were handed out. See Appendix 6.H.
		6.H.3 - Provide copy of schedule and educational materials in Annual Report.	Completed. See Appendix 6.H.

7. Industrial Stormwater Runoff Management Program (Table)

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

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Has the permittee developed and maintained a list of the municipal industrial facilities contributing to the pollutant loading to the MS4? *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have at least two municipal industrial facilities on the list had inspection and sampling conducted?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the answer to items 1 and 2 is "No," provide a statement.

* Consistent with the MS4 Permit and SMP, the UG has an industrial activity stormwater runoff management program to address industrial facilities consistent with 40 C.F.R. § 122.26(d)(2)(iv)(C) that the UG determines are contributing a substantial pollutant loading to the MS4. The UG has developed and maintained a list of the facilities within this group and is inspecting these sites as required by the Permit and SMP. The UG has answered the questions to the best of its ability given some inconsistencies between the questions and the specific requirements of the UG's program. The UG is in compliance with its Permit, ordinances, and SMP.

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.A	Develop SOPs for SW Plan Review/Approval, Industrial Site Inspections, Review of SW Control Measures, and Enforcement Activities.	7.A.1 - Create SOP for SW Plan Review/Approval by March 31, 2013.	Completed SOP in 2015. The SOPs were reviewed and revised. See Appendix 7.A.
		7.A.2 - Create SOP for inspection of industrial sites by March 31, 2013.	Completed in 2013.
		7.A.3 - Create SOP for enforcement actions of violators by March 31, 2013.	Completed in 2013.
		7.A.4 - Include copy of SOPs in Annual Report.	Completed in 2013.
		7.A.5 – Review SOPs for plan review, inspection, and enforcement, prepare a technical memorandum of review, modify if necessary.	2019 task.

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.B	Create and Maintain Industrial Facilities Inventory.	7.B.1 - Annually update industrial facilities registry to include those industries defined in 40 CFR 122.26(d)(2)(iv)(C) that the UG determines are contributing a substantially pollutant loading to the MS4.	Completed. No facilities were added to the registry in 2018. See Appendix 7.B.
		7.B.2 - Provide list in the Annual Report.	Completed. See Appendix 7.B.
7.C	Implement an Industrial Facility Inspection Program.	7.C.1 - Continue annually inspecting two sites on industrial registry.	Completed. Three facilities were inspected. All facilities were compliant with NOI and SWPPP. See Appendix 7.C.
		7.C.2 - Train all UG personnel who will be conducting inspections.	Completed. IDDE training also satisfies this training requirement. See Appendix 3.D.
		7.C.3 - Include a summary of inspection conducted in the Annual Report.	Completed. Three facilities were inspected. All facilities were compliant with NOI and SWPPP. See Appendix 7.C.
7.D	Adopt Legal Authority for Inspection of Industrial Facilities, Review of Onsite Control Measures, and Enforcement.	7.D.1 - Review current Code of Ordinances and adopt any ordinance authorizing this program.	Completed in 2014.
		7.D.2 - Include copy of review results and ordinance activities in the Annual Report.	Completed in 2014

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.E	Develop a program for monitoring industrial discharges to the MS4.	7.E.1 – Develop and maintain a list of industrial facilities consistent with 40 C.F.R. 122.26(d)(2)(iv)(C) that the permittee determines are contributing substantial pollutant loading to MS4.	Completed. See Appendix 7.B.
		7.E.2 – Annually sample stormwater at two high priority facilities.	UG sampled three facilities in 2018. Samples were obtained, and results were within acceptable limits. See Appendix 7.E.

E. Recordkeeping and Reporting

Some permittees are required to monitor surface waters if the permit includes TMDL monitoring requirements for Specific Impaired Streams or Lakes to Target within Part II of the permit. Provide a current map of monitoring locations.

Map and table of sample sites can be found in Appendix 9.C

F. Effectiveness of Source Controls and BMPs

The permit requires a final report on effectiveness of source controls and structural BMPs to achieve the measurable goals. The final report for this MS4 NPDES permit term addressing effectiveness of the Stormwater Management Program to achieve reduction in pollutant discharge from the MS4.

On the following pages address:

1. Effectiveness of pollutant source controls, e.g. public education, identification and elimination of illicit discharges, and the construction site stormwater runoff control program.
2. Address all other BMPs implemented (generally the structural BMPs) under the stormwater management program and address their effectiveness.
3. Summarize water quality test results, if such testing has been conducted, and address any trends or outliers, i.e., unusually high or low pollutant concentrations. As the data is somewhat limited (perhaps only data over the past five years), definitive conclusions may not be possible, however, if trends are observed, some adjustment in the Stormwater Management Program (SMP) may be justified.
4. Address any SMP modifications which will be considered and possibly implemented in the next few years (up to five years).

F. RECORDKEEPING AND REPORTING – FINAL REPORT

EFFECTIVENESS OF SOURCE CONTROLS AND BMPS

INTRODUCTION

The tables on the following pages address the reporting requirements to measure the effectiveness of the BMPs based on the evaluation criteria included in the SMP. The tables also summarize results for those applicable BMPs that include a data collection component. The following sections have been structured to follow the SMP for conformity with the Section (#) tables and appendices.

The tables are color coded. The measurable goals completed in previous year are in gray text and the BMPs and measurable goals which are new or revised in blue text.

APPROPRIATENESS OF BMPs (Permit Part V.A)

The BMPs are generally considered to be appropriate for the local population and pollution sources and no specific concerns have been identified.

RESULTS OF INFORMATION COLLECTED AND ANALYZED (Permit Part V.B)

Based on the water quality results available it appears that the measures and BMPs are keeping TMDL pollutants from significantly rising as a result of growth in Wyandotte County.

SUMMARY OF WATER QUALITY RESULTS

A preliminary assessment of the LTC and BHC watersheds was prepared in 2017. The assessment goes into detail on the potential pollutant loadings and analysis of samples obtained in accordance with the Wet Weather Program. An recap of the Conclusions of the Memorandum can be found below.

Generally, the results for Brenner Heights Creek and Little Turkey Creek were as expected. The exceptions are the concentrations of TSS and TP found in Brenner Heights Creek. Initially sample result concentrations in 2017 indicated that both watersheds may have issues with most of the pollutants. As a follow-up measure, the UG initiated steps to identify possible sewer leaks in 2017 that may have contributed to high E. Coli concentrations at LTC-03. Water Pollution Control was able to report that a recently repaired manhole may have been the source of the concentrations. 2018 concentrations indicate that the pollutant concentrations on average are closely aligned with NURP concentrations (with some slightly above and some slightly below), with the exception of TSS, TN, TKN, and TP in BHC-02.

Grab samples are a snapshot. The information provided by grab samples is valuable but should be considered in context. The UG will continue to use the annual averages and trends over the years as a measure of the MS4 Program effectiveness. Two years of evaluation have been completed. Two more years will be completed; the UG will continue to monitor and determine the use of BHC and LTC as appropriate streams to target for pollutant controls to the Kansas River.

Brenner Heights Creek

There is consistent data to suggest that TSS and TP concentrations may be high enough for the UG to investigate a source and/or suggest a BMP for a future Stormwater Management Plan. The UG will gather further data before fully committing to implementing BMPs.

Little Turkey Creek

The results for Little Turkey Creek are inconsistent for 2017 and 2018. Based on the 2017 data, the concentrations are well beyond NURP concentrations for TSS, TN, TKN, and TP. However, the concentrations in 2018 show a completely different picture with only TSS and TP averages for LTC-03 above NURP concentrations. The UG is considering a few possible reasons for the variations including when the samples were taken in relation to the storm event and previous storm events prior to the sampled storm. The UG will gather further data before deciding on BMPs for the Creek.

The findings of the analysis of the other three sample locations can be summed up as follows.

Mill Creek-01

The results indicate that the Regulated Pollutants sampled seem to be trending down.

Morris Creek-01

The results indicate that the Regulated Pollutants sampled seem to be trending up.

R-7

The results indicate that the Regulated Pollutants sampled seem to be trending down with the exception of Turbidity, TSS and Nitrate + Nitrite which are trending up.

Wyandotte County Lake

The interpretation and results of the samples obtained can be found in Appendix 8. Sample results and indicate the pollutants are below reportable limits for Phosphate. Other regulated pollutants are trending up or are at steady levels. Secchi Disk readings show a positive trend upward reflecting that the water is clearer.

Standard Operating Procedures (SOPs)

The UG continually reviews SOPs for effectiveness. Several SOPs were revised in 2018. Most were minor revisions and may not be included in the Appendices. There were also SOPs revised that included substantive changes. These changes came about as the programs have evolved and were revised to document the practices UG staff follow to perform the tasks associated with an effective program.

SUMMARY OF PLANNED CHANGES

The UG will review and revise the SMP in 2019 to extend the SMP through 2024. As appropriate and based on the timeframe for the reissuance of the MS4 permit, the UG will incorporate new permit requirements into the revised SMP. The revised SMP will be submitted with the 2019 Annual Report.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
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1. Public Education and Outreach

1.A	Gather and Distribute Printed Stormwater Educational Materials.	Review #, type, and content of educational materials distributed and effectiveness of distribution methods. Consider developing or purchasing additional materials for UG's program.	The UG reviewed the materials and locations utilized in 2017 and deemed new materials and locations were not warranted at that time. There have been no changes since 2017 to warrant changes to the 2017 materials and locations.
1.B	Deliver Televised Programs/Announcements on Stormwater Management/Water Quality on UG's Cable Channel.	Review viewership numbers and survey results.	The UG's PSAs were not aired in 2018 due to communication issues between Stormwater Program staff and UGTV staff. The Stormwater Program staff are taking steps to ensure that the UGTV staff is aware of the importance of airing the PSAs on a regular schedule during 2019. See explanation above. A summary of the PSAs can be found in Appendix 1.B.
1.C	Enhance Existing Website to Provide Information on Stormwater Issues.	Review number of website hits and downloads.	The stormwater management page received 3,176 page views and 1,183 unique page views in 2018. The UG is satisfied that the website offers the public critical information in an effective manner. See Appendix 1.C.
1.D	Contribute Financially to Local Agencies within Wyandotte County Who Promote SW Management Improvements.	Review effectiveness of WCCD projects and activities to reduce pollutants to local storm sewers which reach area streams.	The projects and activities are effective in reaching a broad audience. The projects and activities reduce the level of pollutants from reaching local storm sewers and streams through and continue to be effective. See Appendix 1.D for report.
1.E	Contribute Financially to Regional Agencies Who Promote SW Education and Management Improvements.	Review effectiveness of MARC projects and activities to reduce pollutants to local storm sewers which reach area streams.	The projects and activities are effective in reaching a broad audience and are effective in reducing pollutants from entering local storm sewers and streams. See Appendix 1.E for report.
1.F	Utilize Local Newsletters for Education of SW Related Issues.	Review survey/questionnaire results for knowledge and changes in public behavior.	The results from surveys indicate that the persons surveyed are interested in stormwater quality and are actively gaining knowledge and changing behavior accordingly.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
1.G	Annual Review of Media Used for Public Outreach.	Review survey/questionnaire results.	The survey results indicate that those who take the time to fill out the survey are knowledgeable in stormwater and have changed their behavior.
1.H	Create and Maintain a Stormwater Speaker Bureau.	Review surveys from events, evaluate level of interest, review number of attendees.	Created Speaker's Bureau but did not receive any speaker or questionnaire results. The UG will revisit how to advertise the available speakers and topics in 2019.
1.I	Conduct Outreach to Natural Stream Owners.	Review maps and data obtained and evaluate usefulness of information. Review level of interest through questioning property owners approached as part of effort.	The maps indicate a small percentage of streams in Wyandotte County are natural as defined in the memorandum. There is some human influence on nearly all streams. Contacting property owners is a 2019 task. See Appendix 1.I

2. Public Participation and Involvement

2.A	Create a Stormwater Quality Education Grant Program.	Review number of Grant Applications received, funding distributed, and whether funding provides benefits and is well spent.	The program has proven to be effective. Each year more groups are applying for grants. In 2018 seven applications were received and all were awarded. A summary can be found in Appendix 2.A.
2.B	Promote and Implement Community Cleanup Programs.	Review the number of annual events, number of groups involved, types and quantity of trash collected.	This program is effective. Continued partnership with Operation Brightside and Livable Neighborhoods for neighborhood cleanups. See Appendix 2.C.
2.C	Provide Assistance and Materials to Community Groups for participation in a Storm Drain Inlets Stenciling Program.	Review progress towards completing the stenciling of inlets within the service area.	The UG will conduct a deep review of progress toward stenciling inlets and what measures may need to be taken to meet this goal in 2019. See Appendix 2.C.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
3. Illicit Discharge Detection and Elimination			
3.A	Evaluate, and if Necessary, Update Ordinances that pertain to Illicit Discharges.	N/A	Completed in 2013.
3.B	Implement, & Revise if Needed, Standard Operating Procedures for Illicit Discharge Detection, Sampling, Tracking and Enforcement.	Review and revise SOPs as needed.	The SOPs have proven effective in the past and will be more effective following the revisions
3.C	Design, Implement and Maintain IDDE Program Tracking and Reporting System.	Evaluate the system for effectiveness in capturing relevant data and providing sufficient reporting results.	Current system meets needs and is effective in capturing relevant data and providing reports. UG began implementing Lucity software for Major Outfall Inspections. The UG will prepare to implement Lucity for 2019 IDDE investigations. See Appendix 3.C.
3.D	Provide Training for IDDE Inspection Staff.	Analysis of data collected and feedback from personnel conducting ID investigations.	The training in the past two years has improved the quality and confidence of Inspectors. The knowledge and training are reflected in the data collected. See Appendix 3.D.
3.E	Perform Dry Weather Screening of Stormwater Outfalls.	Review effectiveness of SOPs in detecting illicit discharges in the service area.	SOPs are effective in detecting suspected discharges. See Appendix 3.E. Program was evaluated in 2017 and found to be adequate for the UG needs. There have been no changes since 2017 to warrant changes to the 2017 conclusion.
3.F	Implement Program to Televis and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	Review improvements in efficiency in reviewing CCTV data.	The CCTV of sewers has been implemented to the MEP. Reporting and tracking has improved over the last three years. See Appendix 3.F.
3.G	Maintain a Current Storm Sewer Mapping System.	n/a	A map of the Storm Sewer System is located in Appendix 3.G
3.H	Continue the UG's Existing Household Hazardous Waste Collection Program.	Review the quantity of HHW collected each year.	The quantity of materials collected. Participation of residents was up from last year. The program has proven successful since it began, with consistent turnout from citizens. See Appendix 3.H.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
3.I	Engage Commercial Facilities that Have Potential to Contribute Pollutants to the MS4.	Summary of survey and mapping results.	2019 Task.

4. Construction Site Stormwater Runoff Control

4.A	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	Current SOPs are effective at meeting UG's goals. Minor revisions were made.
4.B	Continue to Utilize Tracking System for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities	Evaluate the system for effectiveness in capturing relevant data, allowing query ability, and producing clear reporting results.	The system is being improved each year to capture and track more information deemed relevant to the program. The system is effective in capturing relevant data and allowing querying. The reports are clear and concise. See Appendix 4.B and 4.E.
4.C	Provide Training to UG's Erosion & Sediment Control (E&SC) Inspection Staff.	Review procedures and outcomes to ensure the E&S inspection staff are adequately and consistently evaluating and inspecting project sites that meet the regulations.	The inspections and results have improved each year. Not only have the number of inspections increased, but the quality of the staff inspections has improved. Inspections 2016:312; 2017:276 and 2018:369. See Appendix 4.B and 4.E
4.D	Continue Training Program for Local Contractors and Owners.	Review evaluation and comments of attendees. Consider need for changes to future training.	Comments from those attending were very positive and supportive of UG efforts on Erosion and Sediment Control. See Appendix 4.D.
4.E	Conduct Routine Construction Site Inspections.	Evaluate compliance of construction site owners and response to complaints.	The UG continues to improve on responding to complaints in an efficient manner. The Contractors have been improving on their compliance as efforts to enforce ordinances has improved.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
5. Post-Construction Stormwater Management Program			
5.A	Maintain and Make Available Local Standards for Post-Construction Stormwater BMPs.	Review standards and BMP information annually and update standards and BMPs as necessary.	APWA/MARC BMP committee is continuing to work on an updated BMP Manual. The UG will review for adoption after it is released. Current standards and applicability of BMPs will also be reviewed for cost effectiveness and maintenance issues owners have. The UG will continue to utilize the <i>2009 MARC Manual For Best Management Practices For Stormwater Quality</i> as it's design standard.
5.B	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Post-Construction Site Inspections and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	A Green Stormwater Infrastructure team was assembled in 2018 to look at the UG's current ordinances, design standards, inspections, and enforcement activities. A draft program will be presented in 2019, with a hope for adoption to happen by Jan 1, 2020.
5.C	Conduct BMP Site Inspections and Maintain a Tracking System for Post-Construction Sites.	Evaluate the system for effectiveness in capturing relevant data, allowing query ability, and producing complete reporting results.	The current tracking system is effective. Efforts began in 2018 and continue into 2019 to put both private and public BMP sites into GIS and Lucity (asset management software) to better capture and track relevant information.
5.D	Provide Training to UG's Post-Construction BMPs Inspection Staff.	Review procedures and outcomes of inspections for consistency and results.	Further efforts are needed to improve providing information to owners, maintenance knowledge, and enforcement. Improvements to the program are expected to be implemented in 2019. See Appendix 5.D.
5.E	Develop Training Program For Local Property Owners, Designers and Developers on BMPs regarding maintenance and inspections.	Review evaluations and comments of attendees about the training. Assess whether changes are appropriate for future sessions.	Training in BMP 5.D also met BMP 5.E criteria See Appendix 5.D.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
6. Pollution Prevention/Good Housekeeping at Municipal Facilities			
6.A	Implement, & Revise if Needed, SOPs for Application of Pesticides, Herbicides and Fertilizers on UG Property.	Review and refine SOPs if changes are deemed necessary.	SOPs are effective. Parks and Recreation use minimal quantities of PHFs and only as directed by manufacturer. See Appendix 6.A
6.B	Continue to Operate the UG's Existing Vehicle Washing Facility.	Review effectiveness of wash water removal as it relates to water quality goals.	The UG continues to utilize the washing facilities and finds the facilities effective. All wash water drains to a separation tank then to the sanitary sewer system. This means that wash water is not discharging into the MS4 or local waterways.
6.C	Implement, & Revise if Needed, SOPs for Street Sweeping Activities.	Summary of miles swept, material collected, and review SOP for effectiveness.	SOPs are effective. Street sweeping is very effective in removing sediment that may otherwise enter the S4. The number of miles swept and materials collected are consistent year to year. See Appendix 6.C.
6.D	Provide Training to UG Employees on Good Housekeeping Activities and Information on Reducing Pollutants to the MS4.	Employee feedback and comments and observed behavior changes.	The training and educational materials have been effective. The UG has seen changes in behavior and increased knowledge from those who have received emails and received the various training/education offered during the last three years. See Appendix 6.D.
6.E	Continue Existing Curb Inlet Inspection and Cleaning Program.	Summary of prioritization, inspection techniques, cleaning reports. and SOP	This program is effective. Curb inlets are visited and cleaned in a proactive manner. Conditions and cleanings are tracked in GIS and Lucity database. The inlets are inspected and cleaned thoroughly resulting in better stormwater quality. There have been no changes since 2015 to warrant any additional changes to the program. See Appendix 6.E.
6.F	Implement, & Revise if Needed, Tracking System SOPs for Curb Inlet Inspection/Cleaning Activities. Implement SOP for Inlet Inspections and Cleaning.	Annually review and refine the SOP and the efficiency of inlet inspection and cleaning plan.	This program is effective. The UG reviewed the program and SOPs in 2018. Minor revisions were made to the SOPs.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
6.G	Create UG-owned/operated or UG-operated Buildings and Facilities Inventory.	Review whether all sites required to have NPDES coverage are current on their NPDES Permit and SWPPP.	The UG Fleet Maintenance Center submitted an NOI in 2016, prepared, and is currently following a SWPPP. WWTP 20 underwent improvements to the facility in 2018, which will result in the UG applying for a "No Exposure" Certification in 2019. Site visits and meetings with UG personnel resulted in changes to the Non-regulated facility registry as more accurate information was obtained. See Appendix 6.G.
6.H	Monitor Good Housekeeping at Non-regulated UG Sites.	Review educational materials and if deemed necessary, make needed improvements in information provided.	The facilities associated with the Water Pollution Control Department were visited in 2018. Educational materials distributed were reviewed and found to be effective. See Appendix 6.H.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
7. Industrial Activity Stormwater Runoff Management			
7.A	Develop SOPs for SW Plan Review/Approval, Industrial Site Inspections, Review of SW Control Measures, and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	SOPs were revised. See Appendix 7.A
7.B	Create and Maintain Industrial Facilities Inventory.	Completion of list of industrial facilities in service area as required by SMP.	The UG has been effective at maintaining an updated list of industrial facilities in the service area as required by the SMP. Current methods are effective for updating the Registry. See Appendix 7.B
7.C	Implement an Industrial Facility Inspection Program.	Summary of Compliance of facilities with the UG's ordinances.	Three facilities were inspected in 2018. All facilities were compliant with requirements. See Appendix 7.C
7.D	Adopt Legal Authority for Inspection of Industrial Facilities, Review of Onsite Control Measures, and Enforcement.	N/A (completed in 2014)	N/A
7.E	Develop a Program for Monitoring Industrial Discharges to the MS4.	Summary of the results of stormwater sample analysis and compare to comparable wet weather monitoring in the area.	UG sampled three facilities in 2018. Sample results were comparable to wet weather monitoring in the area. See Appendix 7.B.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
8. Total Maximum Daily Load (TMDL) Regulated Pollutants			
8.A	Develop and Implement BMPs to Reduce TMDL Regulated Pollutants, to the Maximum Extent Practicable, from Entering the Kansas River.	Reductions in bacteria (E. coli) concentrations.	The overall trends show a slight decrease in E. Coli with the exception of Morris Creek. See Appendix 9.C.
8.B	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Evaluate parameters, Secchi disk, and sediment data for effect on pollutants entering WYCO Lake. Modify program as appropriate. Evaluate plan to assess significant sources of phosphorus to Lake.	In-lake sample results did not indicate the lake is experiencing excessive nutrient loads. Further monitoring will continue. Secchi Disk readings indicate trends of increased water clarity. Current trends can be found in Appendix 9.C.
8.C	Develop and Implement BMPs focused on the Little Turkey Creek (LTC) and Brenner Heights Creek(BHC) Watersheds as proxies for the Kansas River.	Evaluate the TMDL parameters reported in Wet Weather Monitoring for any significant change in concentrations of nutrients, sediment and bacteria.	The results of Wet Weather Monitoring indicate no significant increases in concentrations.
8.D	Assess BMPs focused on LTC and BHC watersheds targets as proxies for Kansas River.	Evaluate the TMDL parameters reported in Wet Weather Monitoring as compared to wet weather monitoring results for nutrients, sediment and bacteria.	Data from 2017 and 2018 will be used as a baseline for review of future monitoring results.

BMP Effectiveness and Summary Table 2018

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
9. Wet Weather Monitoring			
9.A	Implement SOPs to address monitoring of Water Quality Parameters.	Review and refine SOPs if changes are deemed necessary.	The current SOPs for wet weather monitoring are effective. Based on the UG's review, no revisions are deemed necessary at this time. See Appendix 9.A.
9.B	Develop Tracking System for Wet Weather Monitoring Activities.	Review tracking system for clarity, usefulness and reliability of information.	The tracking system is effective, clear, useful and reliable.
9.C	Conduct Water Quality Analyses of SW Discharges to Assess Effectiveness of Implemented BMPs.	Evaluate trends to assess water quality impacts and review possible changes to BMPs and stormwater management activities, if required.	The UG is currently reviewing monitoring results and trends. At this time, the UG finds its existing program to be effective at reducing pollutants to the MEP. However, the UG will be collecting more data to determine whether any changes to BMPs or the stormwater management program in general are justified. See Appendix 9.C.
9.D	Perform sampling activities at Wet Weather Monitoring Sites.	Review sampling strategies, sample machine performance and acquisition by UG personnel. Make modifications to the system if appropriate	Sampling strategies applied since 2017 are very successful. The UG obtained all required samples, with the exception of one set of In-Lake wet weather sample due to weather conditions in late summer and early fall. No modifications are necessary.
10. Stormwater Management Program			
10.A	Hire a Stormwater Coordinator	N/A	
10.B	Create SW Executive Committee to Provide Administrative Oversight, Coordination and Direction.	PW Director or designee to determine if committees are effective in implementing the SMP.	The Stormwater Executive Committee determined that committees were not necessary for 2016, 2017 or 2018.
10.C	Conduct an Annual Financial Analysis of the SW Program.	N/A	

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 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)

Name Printed: Jeff Fisher **Title:** Executive Director of DW

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.

Please note the submission requirements on page 1. Submit this report to:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Municipal Programs Section

1000 SW Jackson Street, Suite 420

Topeka, Kansas 66612



Certification

Unified Government of Wyandotte County and Kansas City, Kansas
2018 Municipal Separate Storm Sewer System (MS4) Program Annual Report

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.

Name: Jeff Fisher

Title: Executive Director of PW

Date: 2-27-19