



# Stormwater Management Plan

Kansas Permit # M-MC31-SN01  
Federal Permit # KSR440015

January 2021



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## SECTION 1: Introduction to the Document

**1.1 Purpose of the Stormwater Management Plan:** This Stormwater Management Plan (SMP) outlines the efforts and strategies to be employed for the reduction of pollutants in stormwater runoff within the City of Ottawa, Kansas. The plan is to be used by the community as a guide to stormwater management activities, including stormwater Best Management Practices (BMPs), goals, monitoring duties, and reporting requirements. The document is designed to meet the requirements for Stormwater Management Plans as required by KDHE and the EPA under the Municipal Separate Storm Sewer System (MS4) permitting program.

**1.2 Current Permit Information:** This plan was prepared in compliance with Kansas Permit # M-MC31-SN01 and Federal Permit # KSR440015.

Effective Date: November 1, 2019  
Expiration Date: October 31, 2024

**1.3 Permit Compliance Activities and Schedule:** Part IV of the MS4 General Permit requires certain activities to be completed within the effective permit period. The compliance schedule requirements are as follows.

- **Year 2020:** Submit the Annual Report for calendar year 2019 to KDHE between January 1 and February 28, 2020. Any remaining tasks necessary to complete the update of the SMP should be completed in 2020. Complete the TMDL storm event monitoring of streams within a calendar year and report results via the eDMR reporting process by no later than January 28, 2021.
- **Year 2021:** Submit the updated SMP document to KDHE with the Annual Report to KDHE between January 1 and February 28, 2021. Implement sufficient listed BMPs to achieve the minimum point requirements for each year beginning in 2021. Complete the TMDL storm event monitoring of streams within a calendar year and report the results via the eDMR reporting process by no later than January 28, 2022.
- **Year 2022:** Submit the Annual Report for calendar year 2021 to KDHE between January 1 and February 28, 2022. Implement sufficient listed BMPs to achieve the minimum point requirements for each year. Complete the TMDL storm event monitoring of streams and report the results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28, 2023.
- **Year 2023:** Submit the Annual Report for calendar year 2022 to KDHE between January 1 and February 28, 2023. By February 28, 2023 in addition to the Annual Report, provide a report (PDF format) on the effectiveness of source controls and structural BMPs to attenuate pollutant discharge and achieve the measurable goals including a summary of water quality data from in stream monitoring sites. Implement sufficient listed BMPs to achieve the minimum point requirements for each year. Complete the TMDL storm event monitoring of streams within a calendar year and report the results via the eDMR reporting process by no later than January 28, 2024.
- **Year 2024:** Submit the Annual Report for calendar year 2023 to KDHE between January 1 and February 28, 2024. Implement sufficient listed BMPs to achieve the minimum point requirements

for each year. Complete the TMDL storm event monitoring of streams within a calendar year and report the results via the eDMR reporting process by no later than January 28, 2024.

**1.4 Parties Responsible for Compliance with the Stormwater Management Plan:** Overall responsibility for coordination of activities outlined in this plan, and for reporting, will be by the City of Ottawa's Director of Public Works.

**1.5 Reporting to KDHE:** Annual reporting is required by KDHE to be submitted each calendar year on the 28<sup>th</sup> of February. The report will cover activities conducted during the prior calendar year and will include the following:

- Activities during the previous calendar year.
- The status of compliance with permit conditions, an assessment of the appropriateness of the implemented BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals with an indication of the progress toward meeting the goals for each of the six minimum control measures.
- Results of information collected and analyzed (i.e. test results, surveys, or public comments/input), during the annual reporting period. This may include monitoring data used to assess the success of best management practices with respect to reduction in pollutant discharge. Include an interpretation of the information which addresses success or failure of the portion of the program for which the information applies.
- For BMPs which are directed at reducing the discharge of TMDL regulated pollutants, provide the measurable goals of each BMP with an indication of the progress towards meeting the goals.
- Results of information collected and analyzed, if any, during the annual reporting period, including monitoring data used to assess the success of the program at reducing the TMDL regulated pollutants.
- A summary of the stormwater activities that were scheduled to be undertaken during the previous calendar year and the status of these activities.
- A summary of the stormwater activities which are scheduled to be undertaken during the next calendar year (including an implementation schedule).
- A map showing changes in the permittee's jurisdictional Permit Area if the permit area has changed within the year.
- Description of significant changes in any of the BMPs including those in the SMP implementing the six minimum control measures.
- Updated ordinances or resolution associated with the SMP or the six MCM (minimum control measures) shall be provided with the annual reports.
- A list of other parties (such as other municipalities or consultants) which will be responsible for implementing any of the program areas of the Stormwater Management Plan.



**SECTION 2: Six Minimum Control Measures**

This section describes the six Minimum Control Measures (MCMs) for water quality protection that are required by all MS4 permits. They include the following:

1. Public Education and Outreach.
2. Public Involvement and Participation.
3. Illicit Discharge Detection and Elimination.
4. Construction Site Stormwater Runoff Control.
5. Post-Construction Stormwater Management in New Development and Redevelopment.
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

For each of these control measures the following is provided in this section:

- A summary description of the control measure.
- A table listing BMPs, Measurable Goals for the BMPs, and implementation schedule.

**2.1 Public Education and Outreach:** This MCM consists of implementing a public education program. This includes the distribution of educational materials to the community, conducting outreach activities to address the impacts of stormwater discharges on water bodies, and the steps the public can take to reduce pollutants in stormwater runoff. The implementation of BMPs for this MCM must result in accumulation of at least 4 points on an annual basis for calendar year 2021 and 2022. The total minimum points required increases to 7 beginning in 2023.

BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 - Maintain a stormwater webpage	Maintain the webpage with up-to-date information with all links effective and providing valid information throughout the year. All links need to be checked and the website updated on a minimum monthly basis. Document monthly checks in logbook and indicate changes with logged summaries.	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	3 in 1 <sup>st</sup> year  2 for successive years	2	2	2	2
02 – Post the municipality’s MS4 permit and SMP document on the stormwater webpage.	The two documents must be posted for at least 6 months of the year.	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	1	1	1	1	1
03 – Apply placard or stencil on stormwater inlets to provide a message similar to “No Dumping – Drains to River”	Apply this notification on at least 10% of all known stormwater inlets in the MS4. The required number of stencils/placards must be placed within the year for which points are claimed.	Implement in 2020 and continue  Public Works staff of the City of Ottawa.	2	2	2	2	2



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	Subsequent years may claim points when an additional 5% of all known inlets bear the placard/stencil.						
04 – Provide a telephone number or web-based method for the public to report illicit discharges.	Respond to all reported complaints within 10 days. If found valid, resolve or establish a schedule for resolution within 20 days. Documents complaints and response/resolution process for all complaints received in the year. Reporting method must be available to the public for at least 6 months in the year to claim points.	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	2  Additional 2 points may be claimed for resolving illicit discharges (1 point per resolution).	2	2	2	2
05 - Provide stormwater education for students at a school campus (within grades K-12) within Ottawa’s jurisdiction and up to 30 miles outside. The training may be limited to the individual campus (local school buildings associate with a single address). Training does not need to be provided to the entire school system.	Provide an educator or speaker that will reach at least 5% of the K-12 students who normally attend school in the selected school campus.  Alternatively, fund BMPs at the school campus such as: Installation of BMPs at school Construction of rain garden on school property Rain barrel workshop Rain garden workshop	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	3	3	3	3	3
06 – Operate an information booth at a public event where at least an estimated 200 or more individuals attend.	Provide information about stormwater topics of current interest. All events shall have the booth staffed by the permittee for at least 50% of the days the event occurs.	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	1	1	1	1	1



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07 – Adopt a public education program to reduce littering.	Install and/or maintain signs to discourage littering. Signs will be located in areas where littering has been a problem. Points claimed for any year in which signs are installed and in place for more than 6 months or in cases where signs have previously been installed in any year where the signs remain posted for the full year.	Implement in 2021 and continue  Public Works staff of the City of Ottawa.	0	1	1	1	1
08 – Create a stormwater brochure to provide to the public at public meetings and/or hearings.	Have copies available during at least 10 meetings or public hearings within the year. The brochure shall address stormwater topics of concern.	Implement in 2021 and continue  Stormwater Coordinator for the City of Ottawa.	0	1	1	1	1
09 – Participate in social media program on pertinent stormwater public education topics.	Publish or share social media content on Ottawa’s social media account at least 6 times per year. Record post topic, number of impressions, and engagement for each post. Include a link to Ottawa’s stormwater webpage.	Implement in 2020 and continue  Stormwater Coordinator for the City of Ottawa.	2	2	2	2	2
10 – Operate an adopt-a-street program to utilize public volunteers to clean street right-of-ways.	Volunteers shall clean at least a two-mile section of street (single or multiple streets) within Ottawa’s permit area or adjacent to it. The street right-of-way shall be cleaned at least once/year.	Implement in 2023 and continue  Stormwater Coordinator for the City of Ottawa with volunteers.	0	0	0	1	1
		Points required	4	4	4	7	7
		Points planned for	14	15	15	16	16

**2.2 Public Involvement and Participation:** This MCM consists of implementing a public involvement and participation program to solicit public comment and recommendations regarding the BMPs and measurable goals utilized by the City to comply with the permit. The City will comply with State and local public notice requirements when implementing a public involvement and participation program. The implementation of BMPs for this MCM must result in accumulation of at least 3 points in a calendar year for 2021 and 2022. The total minimum points required increases to 6 beginning in 2023.



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BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Establish a program to encourage residents to install stormwater treatment BMPs on their property.	Encouragement can include funding, grants, financial incentives, trainings, and/or giveaways. Examples like rain barrels, rain gardens, native plantings, native trees, cisterns, and vegetated swales. Record participation numbers annually. One or more of the listed methods of encouragement must be implemented in the year points are claimed.	Continue current efforts: The city gives citizens a 5% - 10% discount on their Stormwater Utility Fee if they implement Stormwater BMPs into their landscaping (Rain barrels, and rain gardens).  Stormwater Coordinator for the City of Ottawa.	2  Additional 1 point each year where participation increases 10% from previous year.	2	2	2	2
02 – Enact ordinance requirement that pet owners, or their keepers, need to immediately and properly dispose of their pet’s solid waste that is deposited at parks or rest areas owned by Ottawa.	The ordinance shall be enacted, and signs posted informing the public of their obligation at the park. The installation of pet waste bag dispensers in public areas qualifies as adequate signage.	Implemented in 2014 under Municipal Code 14-203 E with continued enforcement.  Public Works staff of the City of Ottawa.	1	1	1	1	1
03 – Establish a program to employ (paid or unpaid) high school or college age environmental intern in an environmental related program including but not limited to either the wastewater utility, stormwater utility, potable water utility or solid waste utility.	During the internship, the intern must receive the same environmental related training that a new full-time employee would receive within the first 6 months of the full-time employee’s employment. The internship must last at least 8 weeks in the year points are claimed.	Implemented in 2017 with continued efforts.  Public Works staff of the City of Ottawa.	2	2	2	2	2





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04 – Provide a monetary donation to a scholarship fund for students pursuing a degree in an environmental program which would qualify them to work in a field which can result in water pollution control.	Minimum of \$500 contribution in a year is acceptable. The donation must be made in the year points are claimed.	Implement in 2023 and continue.  Public Works Director for the City of Ottawa.	0	0	0	2	2
05 – Distribute stormwater educational materials to the public within Ottawa’s permit area and up to 30 miles away.	The educational materials for each topic must have a value of at least \$50.	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa.	0	1	1	1	1
06 – Hold park or stream bank clean-up events for public volunteers to aid municipal staff in removing trash, debris, or pollutant sources from the selected clean-up area.	Clean an area which must be equal to or greater than one acre or alternately at least 200 yards of streambank.  At least one such clean-up activity must occur in the year for which points are claimed.	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa.	0	3	3	3	3
07 – Provide at least two events for residents to engage in cleanup activities and improve water quality in the municipality.	Provide at least two events in streams, streamside parks, areas adjacent to public waterways, and/or other green infrastructure/water resources. These events can be any of the following: Environmental restoration events, stream clean ups, tree plantings, or stream monitoring.	Implement in 2022 and continue.  Stormwater Coordinator for the City of Ottawa.	0	0	3	3	3
		Points required	0	3	3	6	6
		Points planned for	5	9	12	12	12



**2.3 Illicit Discharge Detection and Elimination:** This MCM consists of developing, implementing, and enforcing a program to detect and eliminate illicit wastewater discharges or other non-stormwater discharges into the storm sewer system. The implementation of BMPs for this MCM must result in accumulation of at least 5 points in a calendar year for 2021 and 2022. The total minimum points required increases to 7 beginning in 2023.

KDHE requires this program to include, at a minimum:

- Developing a storm sewer system map of the permitted MS4 showing the location of all outfalls, either pipes or open channel drainage, and showing the names and locations of all streams or lakes that receive discharges from those outfalls.
- Implementing and enforcing an ordinance to prohibit non-stormwater discharges into the storm sewer system.
- Implementing a program to detect and eliminate illicit discharges into the MS4.
- Informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- Developing and implementing a plan to detect and address prohibited non-stormwater discharges. The plan must include efforts to identify and evaluate dry weather MS4 discharges.

BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Develop a spill response plan and, if appropriate, coordinate emergency response with other agencies or organizations.	The plan shall include, at a minimum, the following: explanation of appropriate spill response activities for spills associated with vehicle accidents, at grade or above ground storage tanks, and vehicle fluids from mechanical equipment such as construction equipment, cars, or trucks.	Fire Dept has response procedures to follow. Revise as necessary. Implement in 2021 and continue.  Public Works staff in cooperation with Emergency Personnel for the City of Ottawa.	0  3 for initial year  2 thereafter	3	2	2	2
02 – Implement a program to evaluate MS4 outfalls to identify illicit discharges. Inspect at least 5% of known	When at least 5% of outfalls have been inspected and at least one outfall identified as discharging (entirely or partially) flow from an illicit discharge, then the allotted points may be claimed in the	Implement in 2021 and continue.  Public Works staff of the City of Ottawa.	0  1 when 5% inspected in a year	1	1	1	1



outfalls during a calendar year and evaluate any dry weather discharges. Recognize non-stormwater contributions and trace the source of any illicit discharges.	year the illicit discharge is eliminated. Document MS4 outfall inspections, outfalls with dry weather discharges, and MS4 outfalls associated with illicit discharges.	1 point when 5% inspected in that year  Additional 2 if illicit discharge is found and eliminated	+2 if illicit discharge is found				
03 – Implement a Household Hazardous Waste Collection program or document others that have implemented such a program to provide such service to all property owners or residents located within Ottawa’s permit area.	Document the residents and property owners within Ottawa’s MS4 permit area were able to dispose of such wastes at the HHW during a calendar year. An email, letter, or memo from the management personnel of the Household Hazardous Waste facility serving the permit areas is acceptable. The property owners or residents located within Ottawa’s permit area must be able to dispose of HHW throughout the year.	Implement in 2021 and continue.  Stormwater Coordinator in conjunction with Franklin County Household Hazardous Waste Facility.	0	3	3	3	3
04 – Inspect 5% of Ottawa’s stormwater system inlets and/or outfalls within the permit area conducted in a 12-month period to aid in identifying illicit discharges.	Generate a summary report of the inspections including the number of inlets and/or outfalls visually inspected, condition comments, illicit discharges identified, and the results of efforts to eliminate illicit discharges (i.e. discharge line disconnected and redirected to the sanitary sewer or discharge practice terminated). Inspections are to occur within a 12-month term but may cross different calendar years.	Implemented and will continue current efforts.  Public Works staff of the City of Ottawa.  3 if at least 2% is inspected, 5 if at least 15% is inspected	0  3 if at least 2% inspected  5 if at least 15% inspected	3	3	3	3
		Points required		5	5	7	7
		Points planned for		10	9	9	9

**2.4 Construction Site Stormwater Runoff Control:** This MCM includes developing, implementing, and enforcing a program to reduce pollutants in any stormwater runoff to the MS4 for construction sites disturbing one acre or more, including areas that are less than one acre but are part of a larger common plan for development that disturbs one or more acre. The implementation of BMPs for this MCM must result in accumulation of at least 4 points in a calendar year for 2021 and 2022. The total minimum points required increases to 6 beginning in 2023.



KDHE requires this program to include:

- Where permittees have the authority to do so, ordinances or resolutions shall be enacted to require erosion and sediment controls, as well as sanctions to ensure compliance.
- Requirements for construction site owners or operators to implement erosion and sediment control BMPs.
- 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.
- Procedures for site plan review which incorporate consideration of potential water quality impacts.
- Procedures for receipt and consideration of information submitted by the public.
- Procedures for site inspection and enforcement of control measures.

BMP Summary	Measurable Goals	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Require Soil Erosion and Sediment Control (SESC) Plan for any land disturbance sites which are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Enact ordinance, or other enforceable measure that requires an SESC Plan for all developments disturbing sites which either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acres which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Implemented within Municipal Code 14-306 in 2015 and revised with Ordinance 4025-19.  Public Works Director for the City of Ottawa.	3 3 in 1 <sup>st</sup> year  2 in years thereafter	2	2	2	2



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<p>02 – Develop and adopt a design manual for erosion and sediment control BMPs which are required to be used on sites which will be disturbed and are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acres which is part of a larger common plan of development or sale that in total disturbs one acre or more.</p>	<p>Require implementation of BMPs in compliance with the design manual on all sites which meet the disturbed area standard as specified in the “BMP Summary.” Adopt the APWA5100 and 5600.</p>	<p>Implement in 2021 and continue.  Public Works Director and Stormwater Coordinator for the City of Ottawa in cooperation with the City Commission of Ottawa.</p>	<p>0  3 in 1<sup>st</sup> year  2 in years there-after</p>	<p>3</p>	<p>2</p>	<p>2</p>	<p>2</p>
<p>03 – Develop a site plan review process which considers potential water quality impacts which may occur during construction as well as post construction impacts.</p>	<p>Review process must have written guidance for the reviewer. Issuance of a building permit or approval to start construction may not be provided until the site plan has successfully passed the review process either based on the initial site plan submittal or has been modified to comply with requirements identified during the review process. Measure must be included to enforce the installation of water quality BMPs included in the site plan.</p>	<p>Implemented within Municipal Code 14-108.A.4, 13-104, 14-306, and 14-301. Development Procedures Policy Manual- Oct 3, 2018  Implemented in 2018 and continued.  Stormwater Coordinator for the City of Ottawa.</p>	<p>3  3 in 1<sup>st</sup> year  2 in years there-after</p>	<p>2</p>	<p>2</p>	<p>2</p>	<p>2</p>
<p>04- Require construction sites to control wastes. Develop ordinance or other enforceable means to require construction site operators or owners to control wastes. At a minimum</p>	<p>Enact ordinance or other effective means to achieve control of wastes at construction sites.</p>	<p>Implemented within Municipal Code 14-202 B.  Implemented in 2018 and continued.  Stormwater Coordinator for the City of Ottawa.</p>	<p>3  3 in 1<sup>st</sup> year  2 in years there-after</p>	<p>2</p>	<p>2</p>	<p>2</p>	<p>2</p>



control shall be imposed to prevent entry into the MS4 for the following wastes: -Discarded building materials -Concrete -Truck washout -Chemicals -Litter -Sanitary waste							
05 – Develop written procedures for inspection of construction sites. Develop a Stormwater Construction Site Inspection Guide for use by municipal inspectors.	Procedures must address the administrative aspects associated with required inspections of construction sites, the issuance of inspection reports, notices of violations, and enforcement actions. The Inspection Guide must provide inspectors guidance on how to conduct a construction site stormwater inspection, the required procedures, and guidance on acceptable conditions of various BMPs employed on such sites, enforcement actions and/or reference of cases for enforcement by other municipal staff, guidance on photo log of the inspection and inspection checklists for use by the inspector.	Implement in 2022 and continue.  Stormwater Coordinator for the City of Ottawa.	0  3 in 1 <sup>st</sup> year  2 in years thereafter	0	3	2	2
		Points required	0	4	4	6	6
		Points planned for	9	10	11	10	10

**2.5 Post-Construction Stormwater Management in New Development and Redevelopment Projects:**

This MCM includes the implementation and enforcement of 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 or sale, that discharge into the MS4. The implementation of BMPs for this MCM must result in accumulation of at least 5 points in a calendar year for 2021 and 2022. The total minimum points required increases to 7 beginning in 2023.

KDHE requires that the program must include the development and implementation, at a minimum, of the following:



- BMPs to prevent or minimize adverse water quality impacts.
- Strategies which include a combination of structural and/or non-structural BMPs appropriate for the municipality.
- For permittee’s 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.
- Ensure adequate long-term operation and maintenance of structural BMPs.

BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and redevelopment construction sites which are greater than 1 acre of for which is part of a larger common plan of development or sale that in total disturbs one acre or more.  Alternately, adopt and implement the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual.	As an alternative to a custom design manual the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual may be adopted and implemented. Measure must be included to enforce the installation of the various structural BMPs required.	Implement in 2021 and continue. MARC BMP Manual adopted in Ordinance 4025-19 as Municipal Code 14-403  Director of Public Works and Stormwater Coordinator for the City of Ottawa in cooperation with the Ottawa City Commissioners.	0  6 in the 1 <sup>st</sup> year if APW A 5600 & MARC BMP are adopted  5 in years thereafter if implemented APW A 5600 & MARC BMP	6	5	5	5
02 – Develop a list of post-construction or non-structural BMPs which are	Development and implementation of the list and guidance is necessary to claim points in the first year. The list of required	Implement in 2022 and continue.  Director of Public Works and	0  3 in the 1 <sup>st</sup> year	0	3	2	2



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<p>required to be incorporated in any development/redevelopment project. The list must include guidance regarding the BMPs which must be incorporated in various projects as determined appropriate by the permittee. The list is to be provided to entities involved with the design of projects prior to site plan review by the permittee.</p>	<p>BMPs must be enforceable through ordinance or other means.</p>	<p>Stormwater Coordinator for the City of Ottawa in cooperation with the Ottawa City Commissioners.</p>	<p>2 in years thereafter</p>				
<p>03 – Develop and implement a program to ensure adequate long-term cleaning, operation and maintenance of all municipally owned or operated post-construction structural stormwater BMP facilities. The program shall address several different types of these BMP systems. The systems which are addressed shall include any type of post-construction structural BMP system, contained in the MS4. These shall include (if so present):          -Detention ponds          -Retention ponds          -Grass swales          -Pervious paving systems</p>	<p>The program shall be detailed in a written document and made available to all pertinent maintenance staff.</p>	<p>Implement 2023 and continue  Stormwater Coordinator for the City of Ottawa.</p>	<p>0  3 in the 1<sup>st</sup> year  2 in years thereafter</p>	<p>0</p>	<p>0</p>	<p>3</p>	<p>2</p>





-Wetlands -Vegetative filter strips -Manufactured stormwater treatment devices (swirl separators, screens, etc) -Drop inlet-catch basin							
		Points Required	0	5	5	7	7
		Points Expected	0	6	8	10	9

**2.6 Pollution Prevention/Good Housekeeping for Municipal Operations:** In this MCM, the City will 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. The implementation of BMPs for this MCM must result in accumulation of at least 4 points in a calendar year for 2021 and 2022. The total minimum points required increases to 6 beginning in 2023.

BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.	All paved streets which can be swept shall be listed in the schedule for street sweeping. A log shall be maintained listing the street segments which are swept and dates of sweeping and where the street sweepings are disposed or where the material was sent to be recycled and/or reused. At least 10% of the streets which are listed in the street sweeping schedule must be swept at least once in a year to claim points for the year. If equipment is purchased, more points may be claimed.	Implement 2022 and continue.  Public Works staff of the City of Ottawa.	0  3 if 10% of streets swept and City purchases sweeping equipment  2 if 10% of streets swept	0	3	3	3
02 – Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets	Inspect at least 5% of all inlets annually. For any inlets which have evidence of dumped paint, oil or other substances which are considered illicit discharges follow up with efforts to educated	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa in cooperation with the	0  1 if 5% of all inlets inspect	1	1	1	1



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of accumulated debris.	individuals near the impacted inlet about illicit discharges. For inlets which have any accumulation of debris, remove the debris for proper disposal.	Public Works staff of the City of Ottawa.	ed & debris removed  2 if 10% of all inlets inspected & debris removed				
03 – Develop, implement and keep updated an online storm sewer map accessible to the public.	Map shall cover the entire MS4 within Ottawa’s permit area and include all the MS4 lines both pipe and open drainage. Also, shall illustrate all impaired waterways (303(d) listed) with an indication of the listed impairment.	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa and GIS contracting group Midland GIS.	0  3 in the 1 <sup>st</sup> year  2 in years thereafter	3	2	2	2
04 – Develop an employee training program to ensure City employees understand how they can take actions in the workplace to reduce stormwater pollution.	Provide educational materials in the form of fact sheets, flyers, or emails to spread information about what staff can do to reduce workplace stormwater pollution.  Alternately, in-person training or videos can be provided as long as sign-in-sheets are included to document attendance. Copies of the guidance documents and sign-in-sheets need to be kept and a log of when educational materials were distributed to staff should be kept as well. Appropriate training/guidance needs to be provided to staff twice per year.	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa.	0  1 point for each year.	1	1	1	1
05 – Develop a guidance document for pesticide application by municipal staff or contractors. The guidance will stipulate that any municipal staff, who apply restricted pesticides, will need to have a	Staff that apply pesticides will need to comply with the guidance document. The guidance document must require use of pesticides in compliance with the label instructions.  The guidance document must be finalized and implemented in the year which points are initially claimed.	Implement in 2023 and continue.  Stormwater Coordinator for the City of Ottawa.	0  2 in the 1 <sup>st</sup> year.  1 in the years thereafter	0	0	2	1



commercial applicator certification from the Kansas Department of Agriculture, if required by that department.							
		Required points	0	4	4	6	6
		Expected points	0	5	7	9	8

**SECTION 3: Total Maximum Daily Load Regulated Pollutants**

**3.1 Background:** Total Maximum Daily Loads (TMDLs) are established for waters found on the Clean Water Act Section 303(d) list of impaired waters. The purpose of the TMDL is to define the allowable pollutant load that may enter those impaired waters so that those waters attain a condition that fully supports all its designated uses. The TMDL then allocates portions of that allowable load among the likely point and non-point sources discharging the pollutant into the water or its watershed.

The City is required to implement BMPs to reduce to the maximum extent possible the discharge of TMDL regulated pollutants from the MS4 to impaired waters. Total Maximum Daily Load (TMDL) regulated pollutants identified in the current permit are listed below:

TMDL Regulated Pollutant	Specific Impaired Stream or Lake to Target
Bacteria	Marais des Cygnes River, Wilson Creek, and Rock Creek

**3.2 Selection of BMPs:** All of the tasks associated with the Six MCMs are designed to reduce pollutants in stormwater runoff. The implementations of these BMPs must result in accumulation of at least 4 points in a calendar year for 2021 and 2022. The total minimum points required increases to 6 points beginning in 2023. Selected BMPs specifically targeting Bacteria include the following:

BMP Summary	Measurable Goal	Implementation Schedule + Responsible Staff	Points 2020	2021	2022	2023	2024
01 – Install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet	At least one pet waste station shall be installed at the selected park, trail, rest area or other public land. The stations shall include signage and a waste can.	Installations began in 2012 and continue.  Public Works staff of the City of Ottawa.	1 each year	1	1	1	1



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waste disposal at either parks, trails, rest areas, or other public lands owned by Ottawa.							
02 – Enact a stream buffer ordinance, resolution or other enforceable requirement to impose stream buffer standards.	Stream buffer standards must include enforcement capability. Consider use of the EPA stream buffer model ordinance or similar such requirement.	Implemented in 2018 within Subdivision Regulations Article 15, will continue current efforts.  Public Works Director for the City of Ottawa in cooperation with the Ottawa City Commission.	3  3 in 1 <sup>st</sup> year  2 in years thereafter	2	2	2	2
03 – Develop a pet waste brochure or flyer document to educate the public about animal waste contamination of stormwater. The document encourages pet owners to pick up their pet’s waste.  Alternately, post the document to social media or the municipal website.	Documents posted to social media or the website shall have the page copied and printed to retain on file. Documents posted on website(s) shall be posted for at least 6 months. Documents posted on social media shall be posted 6 times within the year points are claimed.	Implement in 2020 and continue.  Stormwater Coordinator for the City of Ottawa.	1 point each year	1	1	1	1
04 – Inspect 10% of all MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges.	If dry weather discharge is found, follow-up with investigation to determine if a portion or all the discharge is illicit. Document the findings and initiate efforts to eliminate any identified illicit discharges.	Implement in 2021 and continue.  Stormwater Coordinator for the City of Ottawa.	0  3 if inspected annually. 5 if inspected twice/year.  2 additional	5	5	5	5



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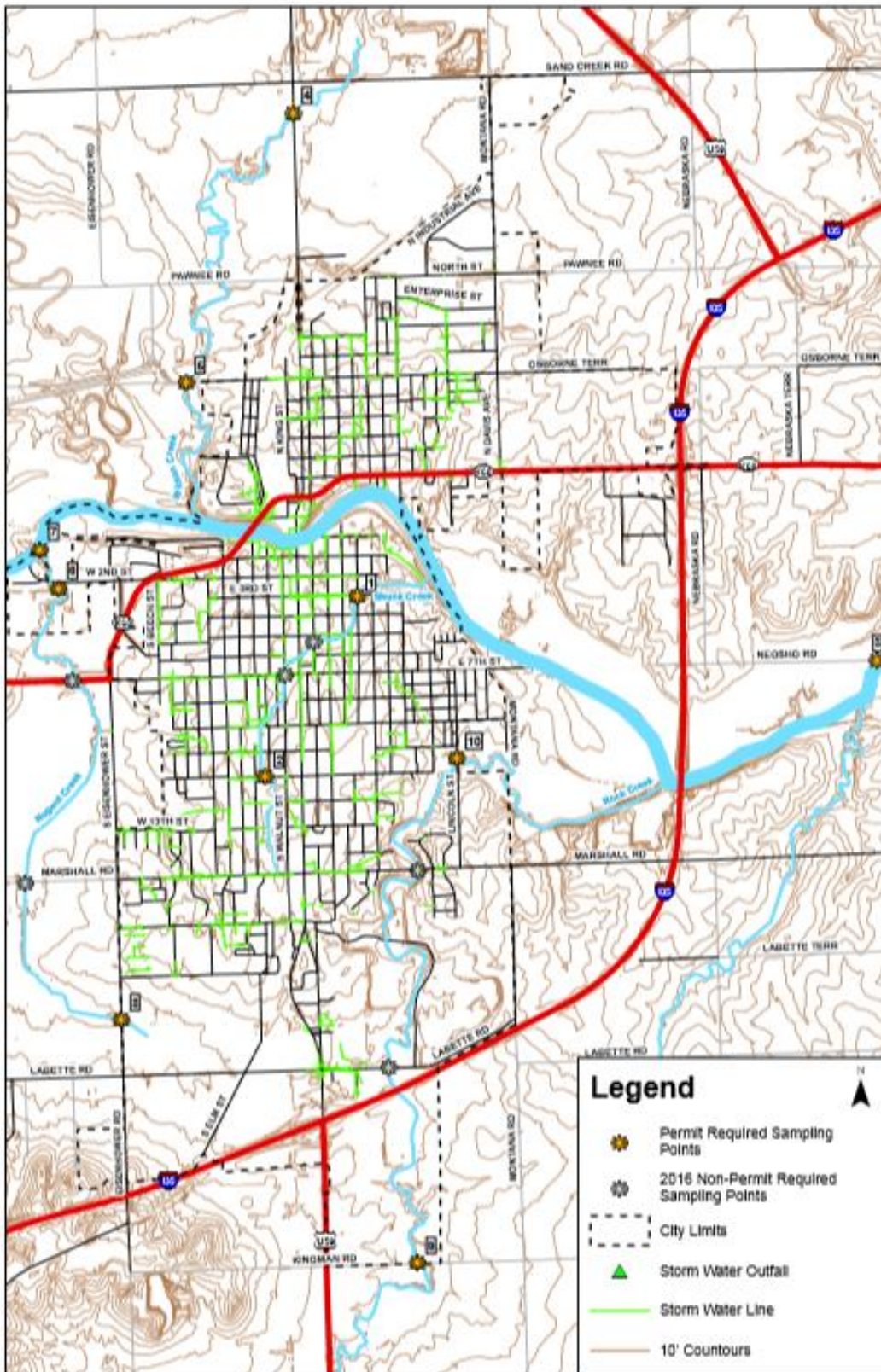
			points in the year of the illicit discharge detected or eliminated in that year.				
05 – Construct and maintain a structural BMP to reduce loadings of sediment and nutrients, including bioretention, detention basins, porous pavement, retention ponds, media filters and any composite treatment trains of multiple BMPs.	A construction project installing a structural BMP must be completed prior to awarding of points. Any individual project will be awarded points scaled on the basis of the extent of the contributing area that the BMP will control. Ottawa will document maintenance of the constructed BMP in subsequent years to continue to be awarded points.	Installations in 2019 at Legacy Square and 2021 at Prairie View BMPs; and continue.  Public Works staff of the City of Ottawa.	3  4 points in the year project is completed for an area over 1 acre.  3 points in the year project completed for an area under 1 acre.  2 points in years thereafter	3	2	2	2
		Points Required:	0	4	4	6	6
		Points Expected:	8	12	11	11	11



**3.3 Establishing Measurable Goals:** The measurable goals for the reduction of the TMDL pollutants will be based on in-stream concentrations. Monitoring of pollutant levels entering and leaving City limits will provide the metric for the successfulness of the BMPs. The TMDL goals include reduction of the concentration/mass of pollutants in the streams within/across City limits.

**3.4 Mapping:** The following map illustrates the City limits, the Marias des Cygnes River, Wilson Creek, and Rock Creek.

### City of Ottawa- MS4 Sampling Locations





**3.5 Alternative Stormwater Offsite Pollution Reduction Program:** This program allows permittees to implement offsite pollution reduction programs outside of the permit area but within the watershed as an alternate to activities within the permit area. The City is not pursuing the program at this time.





## **SECTION 4: Monitoring**

**4.1 Monitoring Requirements:** The permit requires that the City implements a wet weather monitoring program designed to assess the improvements in the water bodies (streams/rivers) due to the implementation of citywide BMPs. The minimum requirements for monitoring are as follows:

1. In-stream sampling of the main streams where they enter and exit City limits
2. Streams to be monitored include the Marais des Cygnes River, Wilson Creek, and Rock Creek
3. Sampling shall be for the TMDL regulated pollutant Bacteria

**4.2 Monitoring Frequency:** At a minimum, four (4) storm events shall be monitored annually for each stream. Each storm event shall be a 24-hr rain or snow melt event greater than or equal to 0.25 inches of precipitation. Samples are to be collected within 4 hours of rising stages on streams. It is recommended the monitoring events occur both in the spring (March 1 thru June 30) and in the summer (July 1 thru October 31). However, it is most important four events be monitored in each calendar year and storm event monitoring can occur in any month.

**4.3 Other Permit Requirements:** Other permit requirements, such as sampling methodology and reference data collection, are listed in the MS4 permit and will be included in the monitoring procedures.



## **SECTION 5: Modifications to BMPs and the Stormwater Management Plan**

This SMP will be evaluated annually and modifications to the Plan, if any, will be submitted with the annual report. Minor modifications to BMPs listed in this plan, if needed to meet program objectives, will be made within 60 days as determined by the permittee or written notification by KDHE.

Each updated SMP document shall provide specific information detailed in the MS4 permit.