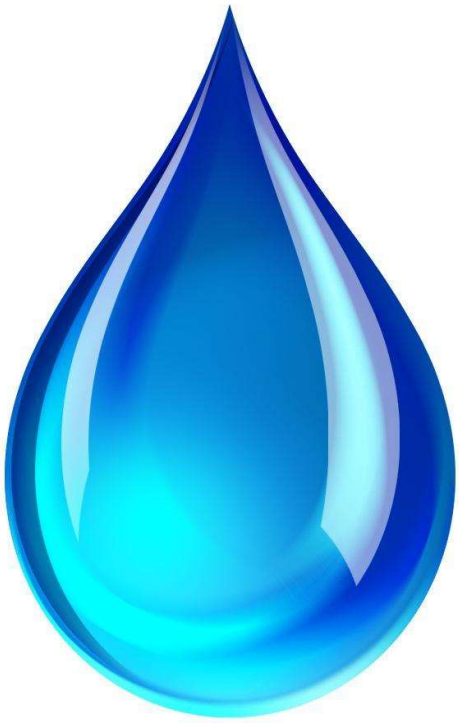
Wentzville Missouri®



2021

Stormwater Management Program Report

Municipal Separate Storm Sewer System

(MS4) Permit #MOR04C075

Reporting Period: January 1 to December 31, 2021

Submitted February 25, 2022

Table of Contents

Note: Public comments regarding the City's Stormwater Management Program, five year plan or this report can be submitted online at bit.ly/wentzvillestormwater.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STORMWATER MANAGEMENT PLAN REPORT

FOR OFFICE USE ONLY
PROJECT ID NUMBER
DATE RECEIVED

Part A – MS4 PERMIT HOLDER INFORMATION

1. MS4 NAME	2. NPDES PERMIT NUMBER	3. MS4 UNIQUE ID NO.	
City of Wentzville	MOR04C075	N/A	
4. ADDRESS	**5. CITY**	**6. STATE**	**7. ZIP CODE**
1001 Schroeder Creek Blvd.	Wentzville	MO	63385
8. TELEPHONE NUMBER WITH AREA CODE	**9. EMAIL**		
(636) 327-5102	Jamie.Paige@wentzvillemo.gov		

10. NAME OF MS4 CONTACT PERSON

Jamie Paige

11. Have any areas of the MS4 been added or removed from the MS4 jurisdiction due to annexation or other legal means since the most recent permit application (renewal, new, modification), or most recent MS4 stormwater management plan report?

☑ Yes ☐ No

If yes, please include a map along with a brief description as an attachment.

Part B – REPORTING PERIOD

1. Is your MS4 subject to a TMDL?

☐ Yes ☑ No

If yes, you are required to submit the MS4 report annually. Reports are due Feb. 28 each year. For the first reporting period, the beginning date will be June 13, 2016, and the ending date will be Dec. 31, 2016. All other annual reports shall cover the reporting period of Jan. 1 to Dec. 31 each year.

2. Is your MS4 new permitted (i.e., is this your first MS4 permit)?

☐ Yes ☑ No

If yes, you are required to submit the MS4 stormwater management plan report annually. Reports are due Feb. 28 each year. For the first reporting period, the beginning date will be the date of issuance of the permit and the ending date will be Dec. 31, 2016. All other annual reports shall cover the reporting period of Jan. 1 to Dec. 31 each year.

3. Is your MS4 a previously permitted MS4 and not subject to a TMDL?

☑ Yes ☐ No

If yes, you are required to submit the MS4 stormwater management plan report biennially (i.e., once every two years). Reports are due Feb. 28 every odd year. The first report will be due February 2017, and will cover the reporting period from June 13, 2016, to Dec. 31, 2016. All other reports shall cover the reporting period of Jan. 1 of the first year to Dec. 31 of the second year.

4. If you are part of a co-permitted MS4 permit, submit combined MS4 stormwater management plan reports, and one or more of the co-permitted MS4s have annual reporting based on the above criteria, then submit your MS4 stormwater management plan report annually by Feb. 28 of each year.

IF you are part of a co-permitted MS4 permit and do not submit combined MS4 stormwater management plan report, then each MS4 co-permittee will submit their MS4 stormwater management plan report based on the above criteria.

5. Reporting Period:

BEGINNING: January 1, 2021 ENDING: December 31, 2021

Part C – STORMWATER MANAGEMENT PLAN REPORT PROGRESS AND COMPLIANCE

As an attachment, please provide information for each of the items below. Provide informative data, success stories, and experiences that support the successful implementation of your stormwater management plan report.

1. Describe the status of compliance with permit conditions for the permitted MS4.
2. Provide information regarding the progress toward achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable to the MS4.
3. If another governmental entity implements any best management practice or minimum control measure, please provide the following:
    a. Name of the government entity;
    b. Name of the primary contact for the government entity;
    c. Contact information (i.e., address, city, ZIP code, state, and phone number); and
    d. Specific best management practices or minimum control measures being implemented by the government entity.

It is the responsibility of the permittee to provide all information under this report regardless if best management practices or minimum control measures are being implemented by another governmental entity. If a complete minimum control measure is being implemented by an alternative governmental entity, then only indicate the best management practice under the minimum control measure.

4. Provide a summary of any stormwater activities and known construction activities that will be covered under the authority of the MS4 permit that are scheduled to begin during the next reporting period.
5. Provide a description of any changes to the stormwater management plan report, best management practices, measurable goals, and the iterative process that have occurred during the covered reporting period.
6. Provide a list of best management practices that were evaluated during the covered reporting period, and provide information on how the best management practice was determined effective.
    a. If any of the best management practices were determined to be ineffective, provide a summary on how the ineffective best management practice was resolved.
7. If any water samples were collected and analyzed during the covered reporting period by the permitted MS4 or on behalf of the permitted MS4, please complete Part D – Water Sample(s) Analysis.

Part D – WATER SAMPLE(S) ANALYSIS

PARAMETER OR INDICATOR	FREQUENCY	RESULT	DRY WEATHER SAMPLE?	WET WEATHER SAMPLE?
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No
			☐ Yes ☐ No	☐ Yes ☐ No

1. Are any of the parameters being sampled due to the MS4 being subject to an established or approved Total Maximum Daily Load?
☐ Yes ☑ No
If yes, please indicate the parameter/pollutant.

2. Does the data support water quality attainment or support trend data toward water quality attainment?
☐ Yes ☐ No
If yes, please describe.

Visual field data collected from dry weather outfall screenings and illicit discharge concerns investigations showed either no evidence of illicit discharges, or confirmed illicit discharges were eliminated through the City's procedures.

Part E – TOTAL MAXIMUM DAILY LOAD (TMDL) ASSUMPTIONS AND REQUIREMENTS ATTAINMENT PLAN

1. Is your MS4 subject to an established or approved TMDL? If no, please indicate "No" below and do not complete any other portion of the TMDL Assumptions and Requirements Attainment Plan portion of this report.

☐ Yes ☑ No

2. Has your TMDL Assumptions and Requirements Attainment Plan been completed and submitted? If no, please provide a summary as an attachment on the progress toward submitting and implementing the TMDL Assumptions and Requirements Attainment Plan.

☐ Yes ☐ No

3. Has your TMDL Assumptions and Requirements Attainment Plan received approval from the department? If yes, please provided a summary of the status of the plan and include implementation status of identified best management practices and measurable goals along with any changes to best management practices or measurable goals (if applicable)..

☐ Yes ☐ No

4. Does the TMDL Assumptions and Requirements Attainment Plan incorporate Integrated Planning? If yes, please provide a summary of the status of the Integrated Plan.

☐ Yes ☐ No

PART F – SUBMIT REPORT TO:

Missouri Department of Natural Resources
Water Protection Program
MS4 Program Coordinator
P.O. Box 176
Jefferson City, MO 65102-0176

PART G - CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OR PERMITTEE (LEGALLY RESPONSIBLE PERSON)	DATE SIGNED
Gregory L Wallace	2/23/2022
NAME (PRINTED OR TYPED)	TITLE
Gregory Wallace, P.E.	Acting Director of Engineering

MO 780-1846 (10-16)

Section B. Stormwater Management Program Progress and Compliance

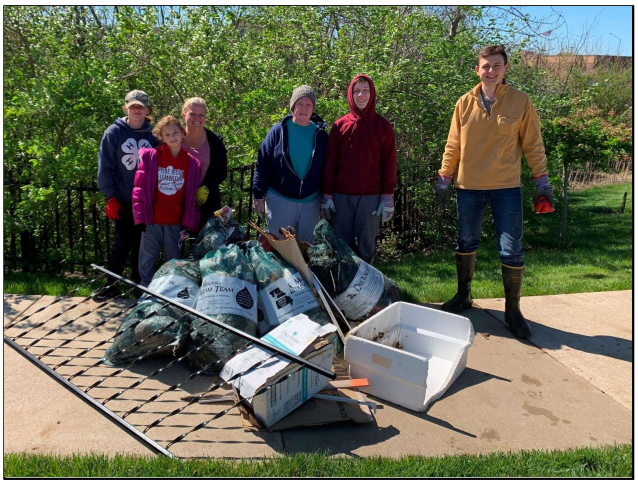
OVERVIEW

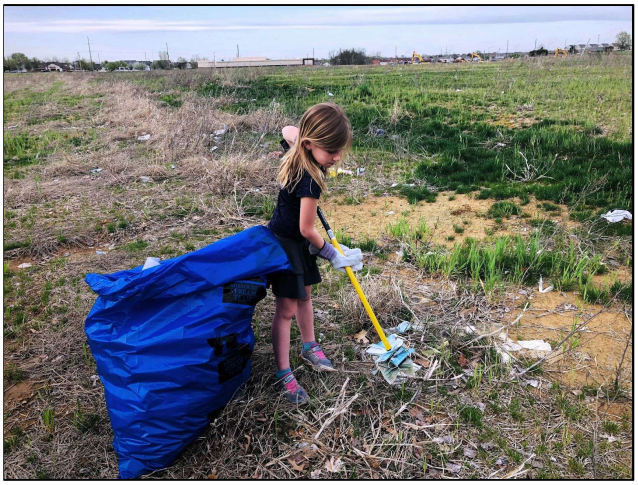
Pursuant to the federal Water Pollution Control Act and Missouri Clean Water Law, the City of Wentzville has been issued a General State Operating Permit #MO-R0C4075 for the Wentzville Municipal Separate Storm Sewer System (MS4) that expires September 30, 2026.

This 2021 MS4 Permit Report summarizes accomplishments for the reporting period of January 1 through December 31, 2021. This report is organized according to requirements of the Missouri Department of Natural Resources (DNR) Stormwater Report Form MO 780-1846.

The SWMP Progress and Compliance matrix is divided into six sections for each of the permit's required Minimum Control Measures (MCMs). A general summary is provided at the beginning of each regarding the status of permit compliance as outlined in the City's 2021-2026 Stormwater Management Plan to address the requirements of the permit.

More detailed information about the City's permit requirements and the activities reported below are provided in Wentzville's Stormwater Management Plan available at www.wentzvillemo.gov.





Wentzville 4-H Club helps clean and beautify at Mission: Clean Stream.
The City of Wentzville is looking forward to the 20th anniversary of this county-wide effort.
Litter continues to be a topic of concern across the community. M:CS is one of many ways the City guides staff and volunteer efforts to help mitigate.

Minimum Control Measure #1: Public Education and Outreach on Stormwater Impacts

Target Audiences: Residents, Developers or construction site operators and local government employees. Optional: homeowners or neighborhood associations

Target Pollutants and Sources: Trash from littering/dumping; sediment runoff from construction/land disturbance; and the improper disposal of household/yard waste, oil, grease and fluids from vehicles

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary

All measurable goals for the public outreach component of the Stormwater Management Plan for 2021-2026 are on track and annual accomplishments have been included below. Multi-faceted outreach and involvement strategies and mediums allow the City to continue to reach a variety of target audiences. The general public, city staff, construction contractors and homeowner's associations are exposed to methods of pollution prevention and reduction through articles, public relations campaigns, newsletters, utility bill inserts, the City website and social media and volunteer opportunities. Live training events, such as contractor/developer onsite meetings and regional seminars, and public Stormwater Advisory Committee meetings continue to be effective in delivering specific messages and generating discussions with stakeholders.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
Outreach and Education BMPs								
Information on the MS4 Operator's website;	Maintain a web page with up to date information, & working links. All links shall be checked, and the page shall be updated as necessary at minimum annually. Must be maintained the entire year.	The number of hits shall be tracked. The MS4 Operator shall use this to see which messages get reactions, and if certain messages may need more education.	Ongoing Annual review by November 15	Stormwater Manager			X	2,710 Visits tracked by 2,270 Users, of which are 1,720 New users
Require installation of permanent embossed, or precast inlets with "No Dumping-Drains to Stream" or similar message.	Requirement for all new inlets in the MS4 area.	Number of inlets, the location of the inlets shall be tracked. These areas shall be noted on MCM #3 dry weather field screenings, and illicit discharge investigations as a method to determine if the markings are effective or if areas could benefit from the markings.	Ongoing	Senior Civil Engineer & Stormwater Manager			X	Standard detail used in EDC; all in-house lid replacements have "Dump No Waste, Drains to Stream" message 400 Inlets marked/updated in GIS 3,576 Total inlets marked **location of inlets are tracked in City's GIS*
Publish articles in a local newsletter, may be electronic.	Develop topics that are group-specific and address activities and or pollutants of concern at a seasonally appropriate time. A minimum of two articles annually shall be published or emailed.	To the extent possible evaluate the pollutant before the article, and again after to see if there has been a change. Consider including a mechanism to track active response such as following the social media account or a website to visit. Track those responses to determine if the article was effective in reaching people.	Ongoing	Community Relations Manager & Stormwater Manager			X	17 Articles published or emailed covering recycling, yard waste, Mission: Clean Stream and litter pickups
Promote, host, or develop educational meetings, seminars, or trainings.	The events shall address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. A minimum of two events shall be held, hosted or promoted annually. These events may address different pollutants/audiences.	Attendance and any distributed education materials shall be tracked. This shall be used to gauge interest in the topic. Consider using a questionnaire or follow-up survey to track if the attendees retained information or found the event beneficial.	Ongoing	Stormwater Manager			X	4 Educational meetings, seminars, or training events held, hosted or promoted
Targeted education campaign (via mail, email or in-person)	Minimum of one annually OR with a specific event. (Examples: Sediment control with small building permit; leaf litter email during street sweeping season, or education brochure to all businesses conducting certain activity.)	Education material distributed, or amount of people contacted shall be tracked. Follow up on if noticeable behavior has changed.	Ongoing	Stormwater Manager			X	4 Targeted education campaigns 1,315 People impacted with material distributed

Involvement BMPs								
Stream/lake or Watershed clean-up events; Litter clean-up events such as street or stream cleanups, park cleanup events, Mission: Clean Stream Adopt-A-Spot;	To be considered an event, the land area cleaned must be at minimum 2 acres, or 400 yards of stream/ streambank/ watershed, or 2 miles of roadside. (These may be combined such as 1 acre of land and 200 yards of stream.)	Track the area or distance cleaned (by acre, yard or lane miles), the amount of waste removed (by tonnage, cubic yard, or Stream Team bag count) and the attendance. Use the waste measurements to determine if there are priority areas for litter entering stormwater, or areas for illegal dumping.	Ongoing	Stormwater Manager			X	16.8 Miles of streams and roads 3,028 Pounds of litter removed from streams and roads
Stormwater-related speaker series	Provide a minimum of two sessions a year. These may be different speakers and/or audiences.	Record the attendance, the topic covered, and any training materials distributed. Use these numbers and interactions during the event to determine if the project or training covered a topic of interest and/or a topic that could be brought to a different or wider audience.	Ongoing	Stormwater Manager			X	2 Speaker series held 93 Materials distributed Topics covered: Post-construction stormwater management, maintenance and regulatory/resource agencies; Stormwater Basin construction and maintenance
Ongoing yard waste collection, designated yard waste collection area, household hazardous waste collection, or street sweeping program.	Provide the service as an annual occurrence or at a readily accessible location. For street sweeping, this shall be conducted at minimum twice a year.	Track the amount collected. If educational information is being used in conjunction with this activity, track for changes due to the education. Tracking can be used with illicit discharge tracking, to determine if the rate of this type of discharges or dumping was reduced.	Ongoing	Director of Public Works			X	Ongoing yard waste collection and monthly/quarterly street sweeping services provided with the following material removed: 168 Tons with street sweeping 2,117 Tons with yard waste collection

2. PROGRESS TOWARDS ACHIEVING THE STATUTORY GOAL OF REDUCING THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP) TO THE MS4

Quantifiable accomplishments listed above demonstrate the City's commitment to education and services that successfully reduce pollutants to the MEP. These strategies remained effective in meeting goals and target audiences despite challenges related to COVID. In response to public concerns about litter in Heartland Park lake and the City's historic downtown area, the #HelpHeartland and #ProtectOurWaterways social media campaigns were created in partnership with the Parks and Recreation and Community Relations staff. Volunteers and staff continue to provide observations on effectiveness. This led to support for approving a litter trap device for the regional detention lake forebay at Heartland Park in the FY2022 budget. Stream Team activities and Mission: Clean Stream continue to be efficient ways to get citizens of all ages involved in assessing and water quality. Efforts continue to collect water quality data indicators, including macro-invertebrate counts and visual surveys to assess short and long-term trends in local creeks such as Peruque, McCoy and Dry Branch Creek. While COVID impacted data collection, volunteer programs and recruitment, the City looks forward to future opportunities to engage stream team volunteers to adopt local streams.

List of any additional programmatic BMPs:

1) Social media campaigns, #ProtectOurWaterways and #HelpHeartland: The #HelpHeartland campaign continues into 2022 and focuses on cleaning up and preventing litter in Heartland Park and the lake within it. This campaign included social media posts, volunteer litter cleanups, additional outreach to business owners, and installation of signage in the watershed. #ProtectOurWaterways featured eight posts to teach about storm drains, local cleanup efforts and some targeted pollutants: litter, pet waste, car wash pollutants and yard waste.
2) Permanent stormwater related signage: As part of #HelpHeartland, "This Drains to Heartland Park" watershed signage reminds those driving, walking and playing near the Park about litter impacts.
3) Utility bill inserts/doorhangers/fact sheets: Stream Care Guides, "Pollution Found in Your Area" doorknockers and Mission: Clean Stream litter utility bill inserts were distributed as needed.

3. NOTICE THAT THE CITY IS RELYING ON ANOTHER GOVERNMENT ENTITY TO SATISFY PERMIT OBLIGATIONS (IF APPLICABLE)

Name of Government Entity:	N/A	Contact Info:	
Primary Contact:		Specific BMPs or MCMs Entity Implements:	

4. SUMMARY OF STORMWATER ACTIVITIES & KNOWN CONSTRUCTION ACTIVITIES TO BEGIN DURING THE NEXT REPORTING PERIOD

In light of COVID impacting outreach and education methods, staff is evaluating ways to create or promote virtual learning options for target audiences and pollutants, such as videos for teachers to use in the classroom.

5. CHANGES TO THE SWMP, BMPS OR THE MEASURABLE GOALS AND THE ITERATIVE PROCESSES THAT OCCURRED

The Public Education and Outreach on Stormwater Impacts Program was reviewed with regards to the BMPs tracked above to evaluate their effectiveness and implementation.
EVALUATE – Do the listed education/outreach BMPs target specific audiences and pollutants likely to have significant stormwater impacts? Do the listed BMPs target pollutants that were observed at illicit discharge concerns or inspections? **YES**
EFFECTIVE – Y or N? If no, change the target pollutants or audiences or change how the BMPs are administered to better address the observed pollutants or illicit discharges. Re-evaluate. If yes, keep target pollutants and audiences the same. **YES**
CHANGES – Are implementation procedures or BMPs updates required? **NO**

Were changes made and noted?
NO. There are no proposed changes to the SWMP, BMPs or measurable goals at this time.

6. LIST OF BMPS EVALUATED AND HOW BMPS WERE DETERMINED EFFECTIVE

Date of Review(s): 4/28/2021, 6/14/2021, 11/15/2021, 1/13/2022
Reviewer: Jamie Paige and Kelly Dunlap

BMPs EVALUATED:
After reviewing all BMPs for the public outreach and involvement component of the Stormwater Management Plan for 2021-2026, staff determined that target audiences and pollutants are addressed by at least one of the BMPs listed and BMP implementation is appropriate and effective in achieving measurable goals. Additionally, feedback from volunteers, staff and the City's Stormwater Advisory Committee were taken into consideration to better refine how outreach BMPs can be implemented. Cleanup events, web and outreach content, and storm drain marking coverage was also reviewed with some updated messaging. Before this reporting period, the City had roughly 60% coverage. While effective, the City wanted to improve coverage across residential neighborhoods for consistent messaging. As a result, 250 additional storm drain markers were placed on inlets, raising coverage to roughly 75%. At this time, only 14 of 128 subdivisions have storm drain marking with less than 50% coverage.

Minimum Control Measure #2: Public Participation

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary
All public participation tasks are on-track to being achieved. Board of Aldermen and Stormwater Advisory Committee meetings comply with state and local public notice requirements. Agendas and minutes are available on the City website. Stormwater Advisory Committee meetings engage stakeholders such as residents, trustees and businesses to help evaluate and improve the Stormwater Management Program. Meetings include an overview of permit-related activities and opportunities for input and guidance on what is appropriate for the community. The Concern Hotline continues to be useful to gauge customer knowledge, behaviors and attitudes when they report pollution and connect with staff to inquire about stormwater quality-related topics.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
SWMP Public Notice Period	30-day minimum public notice period for the draft permit and description of the SWMP which includes posting the SWMP online and providing a way for the public to submit comments	Track site visits. Track and respond to comments	Jan. 2021 Jan. 2026	Stormwater Manager			X	Public Notice Date: 1/25/2021 Renewal Application Date: 3/8/2021 SWMP available at http://bit.ly/wentzvillestormwater
SWMP Public Meeting	Post meeting date, time and location on website at least thirty days prior to meeting	Track meeting attendance and topics covered	Jan. 2021 Jan. 2026	Stormwater Manager			X	Public Meeting Notice Date: 1/25/2021 Public Notice posted on Website Public Meeting Date: 2/25/2021 Location: City Hall and virtual **agendas & minutes with attendance and topics are on the City's website*
Concern Hotline	Annually advertise and maintain hotline with concern tracking system for citizens to report pollution or stormwater issues.	Annually track the topic, location and concern received and follow-up	Ongoing	City Clerk			X	Concern Hotline advertised on website and in articles; 226 Stormwater and pollution concerns tracked **location of concerns are tracked in City's concern hub*
Stormwater Advisory Committee *(optional BMP)*	Implement a Stormwater Management Panel with citizen representation	Track meeting attendance, topics and feedback through agendas & minutes	Ongoing	Stormwater Manager			X	Are citizens on the panel? YES Is attendance recorded? YES **agendas & minutes containing attendance and topics can be found on the City's website*
SWMP Update to the Governing Board	Annually update the City Board of Aldermen on SWMP status, compliance and updates	Track date and method of update	Annually by December 15	Director of Engineering and/or Stormwater Manager			X	Scheduled for 2022 Date of Update: Method of Update: MS4 Representative:

2. PROGRESS TOWARDS ACHIEVING THE STATUTORY GOAL OF REDUCING THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP) TO THE MS4

Opportunities for public involvement in development of the SWMP and accomplishments listed above demonstrate the successful implementation of BMPs/tasks to meet the measurable goals designed to reduce pollutants to the MEP. The City of Wentzville implements a variety of activities to engage the public and key stakeholder groups and organizations to become involved in various pollution prevention BMPs. Direct feedback from residents concerned about litter in the commercial Wentzville Parkway corridor prompted collaboration with the Community Development Department. With citizen input and assistance, letters were sent to 324 local businesses to request their help in tackling litter on their own property to clean and beautify the community.

List of additional events and/or programmatic BMPs:
1) Mission: Clean Stream: Volunteer surveys provide public feedback after the event about the type and location of pollutants found and effectiveness of BMPs
2) Litter Strategy and Partnerships: A survey and letter were sent to prospective local business partners and to help recruit additional volunteers

3. NOTICE THAT THE CITY IS RELYING ON ANOTHER GOVERNMENT ENTITY TO SATISFY PERMIT OBLIGATIONS (IF APPLICABLE)								
Name of Government Entity:	N/A	**Contact Info:**						
Primary Contact:		**Specific BMPs or MCMs Entity Implements:**						

4. SUMMARY OF STORMWATER ACTIVITIES & KNOWN CONSTRUCTION ACTIVITIES TO BEGIN DURING THE NEXT REPORTING PERIOD

In 2022 staff will share the complete and updated SWMP with the Stormwater Advisory Committee and elected officials.

5. CHANGES TO THE SWMP, BMPS OR THE MEASURABLE GOALS AND THE ITERATIVE PROCESSES THAT OCCURRED

The public participation program was reviewed with regards to attendance, inquiries or concerns to determine the effectiveness of 1) how to best reach the public, 2) the mechanisms used, 3) reaching the public and the MS4 governing board; and if the community and MS4 are working together to improve water quality.
EVALUATE – Do BMPs provide opportunities for SWMP input from citizen representatives, stakeholders and volunteers? **YES**
EFFECTIVE – Y or N? If no, change strategy to better address the target audience. Re-evaluate. If yes, continue BMP to track tasks and measurable goals to see if involvement level continues or increases. **YES**.
CHANGES – Are implementation procedures or BMPs updates required? **NO**

Were changes made and noted?
There are no proposed changes to the SWMP, BMPs or measurable goals at this time.

6. LIST OF BMPS EVALUATED AND HOW BMPS WERE DETERMINED EFFECTIVE

Date of Review(s): 4/28/2021, 6/14/2021, 11/15/2021, 1/13/2022
Reviewer: Jamie Paige and Kelly Dunlap

BMPs EVALUATED:
All elected and optional BMPs listed above were evaluated and determined to be effective in actively engaging the public in development and implementation of the Stormwater Management Program. Achievements remain quantifiable and measurable goals meet new permit requirements. The Stormwater Advisory Committee public meetings offered a review of the comprehensive permit, MCMs and SWMP to evaluate and improve program effectiveness. Members provided positive feedback regarding the SWMP, outreach programs, community engagement and additional requests regarding construction and post-construction stormwater BMP standards. While the number of stormwater concerns decreased 55% from the last reporting period, this remains an effective method to encourage citizens to connect to the City to report activities that may cause pollution.

Minimum Control Measure #3: Illicit Discharge Detection and Elimination

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary

All measurable goals are on-track for completion and the regulatory mechanism for stormwater pollution control is enacted. The GIS data collection system has improved historical tracking of inspections and maintenance with water quality indicators. Dry weather field screenings and the Concern Hotline allowed the City to inspect major outfalls to determine compliance and locations of illicit discharges. Training opportunities and flyers continue to educate staff and the general public on ways they can become involved in detecting and tracing the source of illicit discharges. Alternative disposal options are available to customers for large-item pickup, yard waste and Household Hazardous Waste collected within the planned growth boundary.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
Storm System Mapping	Continue to update GIS map with stormwater outfalls, receiving waters and MS4 boundary.	Track the numbering/naming system of all outfalls; dates locations were verified and/or last field surveyed; and for newly added outfalls, the date added to the storm sewer system	Ongoing	Civil Engineer(s) Stormwater Manager			X	1,735 Outfalls tracked Municipal boundary and receiving waters are mapped
	Map MS4 outfalls per new definition in accordance with 4.3.O		November 2023				X	GIS mapping continues to be updated upon dedication/approval
Dry Weather Field Screening Strategy	Screen priority areas, such as those listed in 4.3.H, each year.	Prioritize and track MS4 outfalls screened based on priority areas (i.e. areas with ongoing or a history of illicit discharges, known litter/dumping issues, or increased citizen complaints). Priority areas may be revised as needed based on findings/concern resolution.	Annually by November 15	Stormwater Manager			X	Priority areas are being revised as listed in 4.3H and are scheduled for screening, including priority area 3 from the previous permit cycle which was delayed due to COVID.
	Screen a minimum of 60% of all MS4 outfalls during the permit cycle.	Track the number of MS4 outfalls screened; annually review pollutants discharged, locations and the effectiveness of outreach and enforcement to determine what modifications may be needed.	Ongoing through March 2026				X	10 Total outfalls screened *% of outfalls screened and the % cumulatively screened during permit cycle will be reported in 2022 with the new MS4 outfall definition
Stormwater Pollution Control Ordinance	Maintain one ordinance(s) with provision for enforcement to prohibit non-stormwater discharges to the MS4	Regulatory mechanism with sanctions for enforcement continues to be in place and updated as needed to reflect new permit conditions	Ongoing	Stormwater Manager	X			Ordinance #3096 enacted
Illicit Discharge Detection & Enforcement	Conduct investigations in response to field screenings, complaints and spills.	Maintain a database or centralized system for tracking incidents, investigations, enforcement and follow-up.	Ongoing	Stormwater Manager			X	10 Illicit Discharge concerns tracked
	Document all concerns and locations and removals of illicit discharges		Ongoing				X	8 Illicit discharges found and removed
	Combine the written procedures listed in SWMP MCM 3 into an Illicit Discharge SOP		March 2025				X	

IDDE Training Program	Implement or maintain an employee training program for applicable staff in conjunction with MCM 6, and within one year of being hired. Topics will target staff that routinely come into contact with materials which may become, or otherwise observe illicit discharges or illicit connections to the storm system. This includes spills, improper disposal, mismanagement, improper vehicle or equipment washing or rinsing as indicated by the O&M Manual	Continue to track the training topics in the O&M Manual and the number participants. Review training frequency and effectiveness after site inspections or incidents. Consider ways to survey or test staff to see if the training is effective.	November 2022 and ongoing	O&M Program Responsible Party Stormwater Manager			X	30 Participants from 8 Divisions/departments Pertinent findings of training reviews: Chemical Spill Response training is well received by supervisors in various departments to review this topic more in-depth
Stormwater Pollution Prevention Outreach	Annually inform target staff and the public about illicit discharges and the hazards of improper waste disposal by posting pollution detection information, alternative disposal options and/or the 24-hour Customer Service Center reporting form on the City website, in newsletter articles, using Pollution Found Doorknockers in areas of concern and/or with the O&M Program Manual or Training.	Track outreach methods used. Review outreach effectiveness biennially or as needed to consider updates or enhancements to improve reaching target audiences and outreach messages	November 2023 and ongoing	Communications Manager and Stormwater Manager			X	Outreach methods used: City website features ways to identify pollution, alternative disposal methods and 24-hour reporting form 17 Articles published on the website and in newsletters covering recycling, yard waste and litter pickup 5 Training opportunities offered 324 Flyers distributed

2. PROGRESS TOWARDS ACHIEVING THE STATUTORY GOAL OF REDUCING THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP) TO THE MS4

Accomplishments listed above demonstrate success in reducing pollutants to the MEP. Of the illicit discharges found through concern reporting and screening, 100% were effectively removed. The Stormwater Pollution Control Ordinance continues to provide a process for incident inspection, response, and enforcement and remediation cost recovery, if needed. Through the Preventative Maintenance Program, staff is completing more routine inspections and CCTV for older infrastructure across the City, and prior to acceptance/dedication of new infrastructure. This helps locate priority areas for storm system repairs and identify sources of illicit discharges. Dry weather field screening of outfalls in Priority 3 (expanded area of historic downtown and areas with older sanitary lines) found no suspected illicit discharges. Procedures for water sampling and dye-testing are in place to identify sources. Pollution prevention training for staff continues to help alert MS4 staff of potential illicit discharges during other city inspections.

List of any additional programmatic BMPs (e.g. mapping of the entire storm sewer system, adopting a standard operating procedure for dry weather screening, etc.)
1) Storm sewer system: The entire system is mapped in GIS and updated more consistently and timely upon dedication/acceptance.
2) Stormwater Pollution Prevention Outreach: MS4 and Parks staff have partnered to educate and incentivize business owners and customers to reduce litter in waterways and parks using #HelpHeartland and signage in drainage areas with litter concerns.
3) Alternative disposal opportunities: The City's annual electronics recycling events, as well as curbside yard waste and large item trash pickup days and the Household Hazardous Waste Collection Program provide convenient disposal options for the public.

3. NOTICE THAT THE CITY IS RELYING ON ANOTHER GOVERNMENT ENTITY TO SATISFY PERMIT OBLIGATIONS (IF APPLICABLE)

Name of Government Entity:	N/A	Contact Info:	
Primary Contact:		Specific BMPs or MCMs Entity Implements:	

4. SUMMARY OF STORMWATER ACTIVITIES & KNOWN CONSTRUCTION ACTIVITIES TO BEGIN DURING THE NEXT REPORTING PERIOD

MS4 outfalls will be mapped in accordance with the new definition in permit section 4.3.O.

5. CHANGES TO THE SWMP, BMPS OR THE MEASURABLE GOALS AND THE ITERATIVE PROCESSES THAT OCCURRED

The IDDE program was reviewed with regards to new permit conditions and the BMPs tracked to evaluate their effectiveness and implementation.
EVALUATE – Are pollutants observed from concern inspections and screenings the same as those targeted by the education/outreach and enforcement BMPs and SOPs? **YES**
EFFECTIVE – Y or N? If no, change target pollutants/audiences, screening strategies, inspection and/or enforcement procedures based on types of concerns received and inspection results. Re-evaluate. If yes, maintain BMPs and SOPs based on types of concerns received and inspection results. **YES**
CHANGES – Are implementation procedures or BMPs updates required? **NO**

Were changes made and noted?
NO. There are no proposed changes to the SWMP, BMPs or measurable goals at this time.

6. LIST OF BMPS EVALUATED AND HOW BMPS WERE DETERMINED EFFECTIVE

Date of Review(s): 4/28/2021, 6/14/2021, 11/15/2021, 1/13/2022
Reviewer: Jamie Paige and Kelly Dunlap

BMPs EVALUATED:
All Illicit Discharge Detection and Elimination BMPs have been evaluated and determined to be effective using the iterative process above. The Stormwater Pollution Control Ordinance was deemed appropriate for new permit conditions. During dry weather field screenings, priority areas were determined to be effective based on IDDE investigations and screenings. Priority areas defined in 4.3.H of the new permit were reviewed and remain appropriate for the SWMP. Having a centralized GIS-based asset inventory system has improved tracking and inspection workflows. Storm system maintenance tracking and field screening of major outfalls and priority areas with older sanitary lines occurs with targeted and preventative maintenance inspections. Condition assessments and dry weather screenings provide opportunities to target outreach efforts to reduce potential discharges. The number and nature of illicit discharges located and eliminated evaluated and confirmed BMP effectiveness. For Storm System Mapping, GIS quality control has greatly improved, resulting in a greater confidence in the amount, location and types of stormwater facilities and illicit discharges.

Minimum Control Measure #4: Construction Site Stormwater Runoff Control

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary

All ordinances and procedures for the construction runoff control component of the Stormwater Management Plan are on track to meet measurable goals and new permit conditions. Grading and improvement plans are reviewed for compliance with city codes. Stormwater pollution prevention plans (SWPPP) and sediment and erosion control plans are integrated into all site plan reviews greater than an acre. The Erosion and Sediment Control Ordinance and inspections remain the primary tool to require BMPs at construction sites; the ordinance includes sanctions to ensure compliance per permit section 4.4.A. In addition, Ord. 3634 includes an individual lot deposit ($1,000 per lot or $10,000 citywide lot deposit) that covers SWPPP BMP installation, maintenance and removal through the residential building permit construction phase.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
Construction Site Stormwater Runoff Control Ordinance(s)	Maintain one law, ordinance and/or regulatory mechanism with sanctions to require site operators to implement, and maintain BMPs to reduce pollutants to the MS4	Regulatory mechanism continues to be in place and defines sanctions for enforcement Update ordinance to reflect new permit conditions as needed	Ongoing	Director of Engineering	X			Municipal Code Chapters 515 and 410 (Ord. #3146 and #3634) continue to be enacted to regulate land disturbance projects and guarantee maintenance and improvements.
Pre-Construction Site Plan Reviews (SWPPP)	Review plans for construction projects >1 acre or smaller sites part of a larger common plan using a standardized checklist or criteria for consistency to incorporate consideration of water quality impacts such as slope, project size, proximity and sensitivity of receiving waters.	Annually track the number of engineering plan reviews. Evaluate the plan review SOP and criteria to consider ways to improve consideration of or reduce water quality impacts	Ongoing	Senior Civil Engineers			X	30 Pre-Construction Site Plan Reviews
Construction Site Inspections & Enforcement	Establish and maintain authority and implement procedures for inspecting land disturbance projects including an escalating enforcement policy. Annually track oversight inspections, corrective and enforcement action by retaining the Development Construction Site SWPPP Inspection Forms and related correspondence. Continue to receive and consider information submitted by the public using the Customer Service Center and/or storing correspondence in the development project file.	Maintain an inventory for tracking active public and private projects including contact info, size of disturbance and site priority level. Review SWPPP inspection reports to evaluate needs to modify inspection priorities, training or enforcement procedures to better identify priority areas, assess compliance, evaluate BMP effectiveness and improve consistency. Respond to and annually track concerns and information received to determine if and what plan review, inspection and enforcement modifications are needed.	Update procedures by November 2023 Ongoing	Director of Engineering			X	Municipal Code Chapter 515 authorizes inspection, enforcement and SWPPP submittal requirements of land disturbance projects > 20,000 sq. ft. Development Inspection SOPs are implemented. Active projects tracked 6 Public (Capital) Projects 43 Private (Development) Projects 700 Private (New Residential Construction Lot) Permits MS4 Oversight Inspections 13 on Public Projects 50 on Private Development 1,309 on Private Lots and 550 Contractor inspection reports reviewed Site inspections are prioritized based on site size, proximity to surface water, history of non-compliance, etc. Customer Service Center advertised on website, in articles 226 Stormwater concerns tracked

Construction Site Runoff Control Training for MS4 inspectors and plan reviewers	Provide, or support access to, and track training once during the permit cycle at a minimum, or as needed	Track the staff attendance, topics and training provider/method used	November 2023	Director of Engineering & Stormwater Manager			X	Training scheduled for 2022. Topics: MS4 permit inspection requirements, proper BMP selection, installation, inspection and/or maintenance of controls Training Provider/Method: Onsite/In-person Although not formally targeted in 2021, inspectors and plan reviewers learn about installation, maintenance and selection of construction site runoff controls when processing routine SWPPP inspections and responding to concerns.

2. PROGRESS TOWARDS ACHIEVING THE STATUTORY GOAL OF REDUCING THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP) TO THE MS4

Progress and accomplishments in implementing the BMPs/tasks above demonstrate reducing the discharge of pollutants to the MEP. Standard procedures for plan review include city staff evaluating land disturbances and pollution prevention strategies through pre-construction site plan review and comment prior to permitting. At project pre-construction meetings, contractors are provided a fillable SWPPP inspection report to help meet permit obligations and sediment/erosion control BMPs and requirements are reviewed. In addition, inspectors visit their assigned active grading sites weekly at a minimum and typically conduct SWPPP inspections at rough grading to ensure erosion and sediment controls are installed. Inspectors review SWPPP reports for compliance and inspection prioritization if reports are not received. Continuing from the last reporting period, the most notable change has been addressing SWPPP deficiencies and achieving permanent stabilization on individual residential lot inspections, which are part of larger developments. Final yard inspections, coupled with erosion control checks at footing inspections led to a total of 1,643 construction site runoff control inspections for 700 new residential building permits. COVID-19 impacted SWPPP training opportunities for builders, contractors and staff inspectors. However, inspectors and plan reviewers strived to maintain effective communication at the individual site level.

The 24-hour online reporting tool remains instrumental for citizens to report issues to help reduce the discharge of pollutants. Despite COVID impacts, construction activity remained strong. The number of construction-related concerns tripled from the last reporting period, pointing to improved education/awareness from citizens. Common reported issues that were addressed through follow up education and enforcement include sediment, litter and concrete washout.

List of additional programmatic BMPs added to the SWMP (i.e. including onsite pre-construction visits, adopting a standard operating procedure for enforcement measures, etc.)
A uniform Development Inspection SOP is adopted for consistency in inspections and enforcement.

3. NOTICE THAT THE CITY IS RELYING ON ANOTHER GOVERNMENT ENTITY TO SATISFY PERMIT OBLIGATIONS (IF APPLICABLE)

Name of Government Entity:	N/A	**Contact Info:**	
Primary Contact:		**Specific BMPs or MCMs Entity Implements:**	

4. SUMMARY OF STORMWATER ACTIVITIES & KNOWN CONSTRUCTION ACTIVITIES TO BEGIN DURING THE NEXT REPORTING PERIOD

Over the next reporting period, inspection oversight will continue to be reviewed with a focus on new permit inspection and enforcement requirements and consistency across staff/sites.

Anticipated construction includes:
David Hoekel Parkway Phase 2 (A,B,C) Interchange, David Hoekel Parkway Phase 2D, Great Oaks Blvd. Extension & Left Turn Lane Addition, Water Reclamation Center Phase 3 Expansion, Wentzville Community Center, Wentzville Parkway South Phases 1 & 2, West Meyer Road Phase 3

1051 Corporate Parkway, 126 Enterprise Drive, Arbor Valley, Auto Plaza, Boulevard at Wilmer Valley, Crystal Creek Commercial, Discovery Center, First Community Credit Union, Golf Club of Wentzville Plat 5, North Point Middle School, Prairie Wind, Prominence Point, St. Charles Partners Building Expansion, Sutton Farms Phase 1, Timber Trace Phase 5, Travers Auto & RV, Twin Oaks at Heritage Pointe Phase 2, Villages at Huntleigh Ridge Phase 2, Wentzville Bend Outlots, Wentzville Heartland View Apartments, Wentzville Logistics Center Building 2, Wentzville Oaks South, Westhaven Phase 6

5. CHANGES TO THE SWMP, BMPS OR THE MEASURABLE GOALS AND THE ITERATIVE PROCESSES THAT OCCURRED

The construction site stormwater runoff control program was reviewed with regards to the BMPs tracked above to evaluate their effectiveness and implementation.
EVALUATE – Are pollutants observed from concerns and inspections the same as those targeted by the training, inspection and enforcement BMPs? **YES**
– Do SOPs and ordinances require operators to implement and maintain BMPs to reduce pollutants to the MS4? **YES**
EFFECTIVE - Y or N? If no, change target pollutants/audiences, inspection/enforcement priorities, SOPs or ordinances based on the types of concerns received and inspection observations or results. Re-evaluate. If yes, keep target pollutants/audiences, SOPs, etc. based on types of concerns received and inspection observations/results. **YES**
CHANGES – Are implementation procedures or BMPs updates required? **YES**

Were changes made and noted?
YES. The SWMP was reviewed and updated to address permit section 4.4.B.1 pre-construction plan review factors and 4.4.E required inspections from construction site operators. In addition, modifications were made to developments final inspection reports to include noting SWPPP status and final site stabilization as an additional check prior to approval.

6. LIST OF BMPS EVALUATED AND HOW BMPS WERE DETERMINED EFFECTIVE

Date of Review(s): 4/28/2021, 6/14/2021, 11/15/2021, 1/13/2022
Reviewer: Jamie Paige and Kelly Dunlap

This annual review may include, but is not limited to:
- X *Evaluating the most common violations, how the violations are handled, how many are escalated;*
- X *If the education program can assist in reducing violations;*
- X *Determining if the site plans match the sites when violations arise or if additional items need to be evaluated at plan review;*
- X *Assessing public complaints being addressed in a timely manner; and*
- X *Evaluating if the inspections are thorough and consistent across different sites.*

BMPs EVALUATED: Reviews of programs, ordinance and procedure effectiveness
This is indicated by "X" in the list above. Construction site inspections and enforcement procedures were reviewed after implementation of the revised Development Inspection SOP. BMP review also found that SWPPP enforcement is more consistently tracked using the development site SWPPP inspection checklists. BMPs were determined to be effective through the iterative process outlined above; however some training and inspection improvements could be achieved for better consistency and/or compliance through targeted outreach, inspection tracking strategies, and/or training for new MS4 permit requirements. Evaluation of Pre-Construction Site Plan Reviews and training feedback from MS4 inspectors and plan reviewers continue to be important tools that confirm whether BMPs are appropriate and successful in achieving goals.

Minimum Control Measure #5: Post-Construction Stormwater Management in New Development and Redevelopment

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary

All ordinances and procedures for the post-construction component of the Stormwater Management Plan are on track to meet measurable goals. The Engineering Design Criteria provides standards for long-term stormwater facilities, as well as operations and maintenance plans and guarantees for maintenance. Planned growth policies help guide staff, developers, and elected boards when making land-use decisions and directives.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
Post-Construction Runoff Ordinance (Engineering Design Criteria)	Maintain ordinance(s) that adopt design standards using a combination of structural and/or non-structural controls to minimize water quality impacts in accordance with permit conditions	Regulatory mechanism continues to be in place and defines maintenance responsibilities Update ordinance to reflect new permit conditions as needed	Ongoing	Director of Engineering	X			Municipal Code Chapters 505.200 (Ord. #2878 and revised by #3276 and #3635) continue to be enacted
Non-Structural Post-Construction Controls (Planned Growth Ordinances and Policies)	Maintain ordinance(s) that adopt preventative actions that involve management and source controls in accordance with permit conditions such as: Protect sensitive areas (stream riparian corridors and wetlands) Promote green infrastructure, minimizing impervious surfaces, disturbance of soil/vegetation Direct growth to identified areas, re-development, infill, and brownfields Maintain/increase open space	Track application of ordinances and Comprehensive Plan objectives through land use and improvement plan reviews. Review policies & standards as part of adaptive management and update as needed. Natural Watercourse Protection Ord. (25' buffer or more based on size) and Floodway Districts Engineering Design Criteria and Land Use Plan Reviews and Policy Wentzville Comprehensive Plan Tree Preservation and Planned Development Ordinances address preservation or open space minimums. Parks & Recreation parklands increase open space	Ongoing	Director of Engineering Director of Community Development	X			Site plan reviews tracked Natural Watercourse Protection Ord. and Floodplain Management implemented EDC promotes impervious cover reduction. Land use plan reviews assess site design options for protecting sensitive areas and minimizing disturbances. Comprehensive Plan adopted in 2018 and used to guide land use decisions. Open space, tree preservation and Planned District ordinances in place. Ord. 3660 improves the intent of Planned Development zoning requests to encourage this goal.
Pre-Construction Site Plan Reviews (Water Quality Non-structural & Structural BMPs)	Conduct plan reviews to assess site characteristics at the beginning of the design phase to ensure adequate planning for stormwater program compliance using a standardized plan review checklist. Evaluate non-structural BMP selection first using tools such as comprehensive plans, zoning ordinances, buffer strips and/or maximization/preservation of open space.	Annually track the number of engineering plan reviews. Evaluate the plan review SOP and/or checklist to consider ways to assess compliance and/or consistency	Ongoing	Senior Civil Engineers			X	20 Site plan reviews conducted

BMP Operations & Maintenance Plans and Agreements	Agreements and maintenance plans are maintained on file for 100% of BMPs in affected developments	Annually review O&M plan and agreement requirements. Use staff feedback for potential improvements to improve long term O&M and records retention.	Ongoing	Senior Civil Engineers			**X**	Maintenance Covenants and Plans tracked for all stormwater quality BMPs
Water Quality Structural and Non-structural BMP Inspections & Enforcement	Inspect, or require inspection of, each water quality structural and non-structural BMPs to meet the following permit-required number of inspections/frequencies and tracking: a) 1 or more during construction b) 1 before the site is finalized (to verify they are built as designed, an any boundaries or practices for non-structural BMPs are observed) c) 1 or more during the first three years after installation by the MS4 Operator d) Annually by the BMP owner/operator or by the MS4 Operator e) 60% or more of all water quality BMPs within the five-year permit cycle, including those with ongoing/open enforcement issues Begin enforcement action within 30 days of discovering a violation (i.e. verbal, education, notices, fines etc.)	Evaluate ordinances and SOPs to determine if changes are needed to accomplish the inspection and enforcement goals of this BMP. If changes are needed, adopt changes by 11/2/2023 and evaluate if a written water quality BMP inspection and enforcement SOP needs to be formalized. Annually review inspection reports and trends with enforcement; evaluate if inspection priorities or enforcement should be modified based on need	Adopt changes by 11/2/2023 Ongoing	Senior Civil Engineers & Stormwater Manager			**X**	59 Inspection reports reviewed (71% of 83 BMPs) 15 Site meetings were conducted with property owners to improve awareness of inspection and submittal requirements.
Storm System Mapping	Continue to update GIS map with stormwater quality facilities (WQ BMPs), type, O&M files, approval dates, responsible party contacts, and maintenance activities (if MS4-owned)	Annually track stormwater quality facilities (WQ BMPs) on GIS map layers and through inspection records	Ongoing	Civil Engineer(s) Stormwater Manager			**X**	GIS mapping updated upon dedication/approval with facility type, approval dates, responsible party contacts, and maintenance activities (if MS4-owned); O&M covenants are stored in the development project file 83 Stormwater quality facilities
Post-construction Site Runoff Control Training for MS4 inspectors and/or plan reviewers	Provide, or support access to, and track training once during the permit cycle at a minimum. Training shall explain the function of both structural and non-structural post-construction water quality BMPs. It may include green infrastructure, operations of proprietary BMPs, etc.	Track the staff attendance, topics and training provider/method used	Ongoing	Director of Engineering & Stormwater Manager			**X**	13 Inspectors and/or plan reviewers trained Topics: proper selection, installation, inspection or maintenance of controls Training Provider/Method: St. Charles County Regional Seminar

2. Progress Towards Achieving the Statutory Goal of Reducing the Discharge of Pollutants to the Maximum Extent Practicable (MEP) to the MS4

Overall, the accomplishments listed here demonstrate the successful implementation of the BMPs/tasks designed to reduce pollutants to the MEP. The City's engineering design requirements address post-construction standards for water quality improvement for new and re-development, as required by permit. Stormwater quality facilities built to this standard are capturing and treating runoff from 90% of recorded daily rainfall events. This equates to treating more than 2.11M cubic feet of runoff from Wentzville's MS4 to date. BMP Operations & Maintenance Plans and Agreements are in place for 100% of water quality BMPs prior to the City's final acceptance, improving long-term maintenance outcomes and pollution reduction potential. Implementation of an Online Stormwater Quality Facility Inspection Portal and routine reminders help improve annual inspection submittals and awareness of maintenance responsibilities across sites.

Additionally, a variety of tools are implemented to guide land use decisions for new development, protect sensitive areas and address long-term stormwater runoff in the City of Wentzville. Natural physiographic features are evaluated and considered for protection through the City's Comprehensive Plan and Tree Preservation, Planned District, and Natural Watercourse Protection ordinances.

List of any additional programmatic BMPs and procedures:
1) Interpretive signage and outreach: Demonstration projects like Heartland Park, Oasis Kwik Car Wash and residential areas serve as a reminder about the intent and success of BMPs such as forebays, bioretention, wetlands and pervious pavement.
2) Water Quality Inspections & Enforcement: Online submittal tools were enhanced to offer convenience for reporting inspections for proprietary treatment system and underground detention.
3) Citywide Hydrologic Assessment: A stormwater grant from the Missouri Department of Natural Resources is in progress to assist the City in developing a hydrologic assessment. Project goals include evaluating the effectiveness of Channel Protection Volume requirements in the EDC and identifying where potential streambank erosion issues may occur in a 'built-out' development scenario.

3. Notice that the City is Relying on Another Government Entity to Satisfy Permit Obligations (if applicable)

Name of Government Entity:	N/A	**Contact Info:**	
Primary Contact:		**Specific BMPs or MCMs Entity Implements:**	

4. Summary of Stormwater Activities & Known Construction Activities Scheduled to Begin During the Next Reporting Period

Inspection schedules, enforcement procedures and training opportunities will be evaluated for modifications for new permit requirements. The Comprehensive Plan review and update process will continue in 2022 with stakeholder reviews through the Planning & Zoning Commission.

5. Changes to the SWMP, BMPs or Measurable Goals and the Iterative Processes that Occurred

Iterative Process: Ordinances, Procedures and Enforcement
EVALUATE – Do procedures, agreements and ordinances ensure controls and strategies are in place and maintained to prevent or minimize water quality impacts or incentivize planned growth? **YES**
EFFECTIVE – Y or N? If no, change procedures, agreements or ordinances based on types of controls ineffectively used or maintained. Re-evaluate. If yes, continue BMPs and strategies. **YES**.
CHANGES – Are implementation procedures or BMPs updates required? **NO**

Were changes made and noted?
YES. Land use growth policies were evaluated as part of the Comprehensive Plan review and update process, with stakeholder reviews through the Planning & Zoning Commission. While effective, changes to Water Quality BMP Inspections outlined in the SWMP are being drafted to address new permit requirements and tracking needs.

Iterative Process: Training and Outreach
EVALUATE – Are pollutants observed from concerns and inspections the same as those targeted by outreach and training? **YES**
EFFECTIVE – Y or N? If no, change pollution prevention outreach methods, targeted pollutants or audiences based on types of concerns received and inspection observations/results. Re-evaluate.
If yes, keep BMPs and strategies that provide measurable achievements. **YES**
CHANGES – Are implementation procedures or BMPs updates required? **NO**

Were changes made and noted?
NO. There are no proposed changes to the SWMP, BMPs or measurable goals at this time.

6. List of BMPs Evaluated and How BMPs were Determined Effective

Date of Review(s): 4/28/2021, 6/14/2021, 11/15/2021, 1/13/2022
Reviewer: Jamie Paige and Kelly Dunlap

BMPs EVALUATED:
The City completed an annual review of the following (select all per 4.5.M):

- X Reviewing the number and types of developments;
- X How many BMPs were installed/inspected;
- X The amount of watershed area or water quality volume being treated;
- X The types of violations found and how frequently; and
- X How education could improve the effectiveness of the program.

The BMPs listed above have been evaluated for effectiveness in post-construction stormwater management for new development and redevelopment. Quantitative indicators include 100% review of stormwater quality facility inspection reports and site plan reviews conducted on 100% of all proposed developments. An annual review of water quality BMP Inspections reports found that the timing of education and reminders for subdivisions could help improve effectiveness and inspection submittals from property owners (i.e. late spring/early summer for subdivisions, summer for school facilities, and end of summer/fall for other private owners). The most common types of maintenance issues were vegetative overgrowth, slope erosion, cleaning out swales, or tree growth around infrastructure. The City continues to explore ways to better educate and communicate with new trustees and property owners after initial construction. Inspection priorities or enforcement are also being evaluated to consider if a written water quality BMP inspection and enforcement SOP needs to be formalized.

During the previous reporting period, stakeholders in the development community questioned engineering designed standards and policies for stormwater management. To assist with responding, the City is completing a grant-funded Citywide Hydrologic Assessment. Modeling will assess current stormwater management needs as well as in a future 'built-out' scenario. This includes flood and/or channel protection volumes that are designed to reduce peak flows and help protect stream channels from erosion, existing stormwater control facilities, and related ordinances (i.e. natural watercourse buffer width/locations, Planning & Zoning requirements, floodplains, etc.) The outcome will provide prioritized recommendations that are supported by modeling for ways to mitigate impacts. Recommendations will help address the following, as needed:

1) Protecting public infrastructure or public property;
2) Evaluating the retrofit potential of existing stormwater control facilities;
3) Revising municipal standards, ordinances or policies, and/or
4) Prioritizing potential solution to stormwater management issues to achieve community goals and permit compliance with limited funding and future changes to state/federal regulations.

Minimum Control Measure #6: Pollution Prevention/Good Housekeeping for Municipal Operations

1. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS

Summary

A review of the updated permit was completed. Best Management Practices (BMPs) and the City's Operations and Maintenance (O&M) Plan are being updated to reflect necessary changes. The City is planning to have these changes within the required timeframe of one year from permit issue date. All measurable goals are on-track, with updated procedures, inspections and training opportunities in place to implement the Operations & Maintenance program. The City continues to effectively reach interdepartmental staff with maintenance or contractor oversight responsibilities through in-house training and promotion of regional workshops.

Status of Measurable Goals

Task / BMP	Measurable Goal(s)	Tracking & Adaptive Management	Implementation Schedule	Individual(s) Responsible	Goal Complete?			Accomplishments
					Yes	No	On-track	
O&M Employee Training (i.e. staff who work with material handling, at MS4 owned or operated vehicle/equipment maintenance areas, storage yards, and material storage facilities).	Promote, or conduct and maintain and utilize an employee training program for MS4 municipal operations staff. Trainings are given at minimum annually, during new staff orientations or as needed in accordance with the O&M Program Manual.	Track and review the applicable staff, training topics, number of trainings promoted/conducted and number of participants.	Ongoing	O&M Program Responsible Party Stormwater Manager			X	5 Trainings promoted/conducted 53 Participants Topics: O&M Plan and BMPs Spill Response Illicit Discharges SWPPPs
Operations & Maintenance (O&M) Program	Update and maintain the O&M Program and Manual. Include pollution prevention controls, inspection and staff training schedules, and tracking requirements implemented annually. The O&M Manual shall be present onsite/electronically with staff at facilities. Develop maps and descriptions of structural controls/BMPs to reduce or prevent the discharge of floatables and pollutants from entering waters of the state or other MS4s where needed.	Track and review the applicable municipal operations, locations and BMPs that may have water quality impacts. Update program to reflect new facilities, operations, or BMPs as needed.	July 2022 November 2022	Stormwater Manager & O&M Program Responsible Party			X X	Responsible parties in each division listed continue to administer their piece of the O&M Program. Staff completed an annual review to address new facilities, changes in operations, materials used/stored, etc. Updates are being incorporated into the O&M Program Manual.
Municipal Facility Inspections & Maintenance	Perform inspection and maintenance activities at municipal facilities in accordance with the O&M Manual.	Track inspections, maintenance activities, and updates annually; keep on file through the permit cycle.	Ongoing	Stormwater Manager & O&M Program Responsible Party			X	14 Facility inspections conducted Corrective action/maintenance activities tracked
Flood Management Projects	Assess all new flood/stormwater projects for water quality impacts	Design criteria continue to be in place to assess all projects and recommend water quality protection practices/BMPs through Engineering plan review	Ongoing	Senior Civil Engineers			X	New flood management projects were reviewed for water quality standards as outlined in the EDC 2 Projects were reviewed 0 Projects required water quality BMPs (Projects only replaced deteriorated pipe and maximized efficiency of existing pipe.)

Road Salt/Brine/Deicer Alternatives	Annually track usage of rock salt, brine or other street deicers or salt alternatives for street deicing pre-treatment with the goal of reducing use of traditional road salt.	Evaluate and track use of traditional road salt and alternatives	Ongoing	Superintendent Street, Signals & Fleet			X	Rock salt & brine pre-treatment alternatives tracked: 2,011 Tons of salt for the season 85% Reduction in salt to pre-treat 182 Lane miles using 49.2 Tons of salt for brine pre-treatment (3,600 gallons of brine vs. 327 tons of tradition rock salt applied at 300 lbs./lane mile)
Street Sweeping	Sweep main streets a minimum of twice yearly and a goal of twice monthly and subdivision streets quarterly, weather permitting	Track frequency of street sweeping operations, and estimated amount of debris removed	Ongoing	Superintendent Street, Signals & Fleet			X	Main streets frequency: Monthly Subdivision streets frequency: 5 Times/ year 168 Tons of debris removed

2. Progress Towards Achieving the Statutory Goal of Reducing the Discharge of Pollutants to the Maximum Extent Practicable (MEP) to the MS4

Observations from street sweeping, road deicer alternatives, and feedback during annual O&M Program review and staff training has demonstrated progress in reducing pollutants. Streets maintenance activities include routine sweeping operations and salt brine road applications, rather than rock salt for pre-treatment. For this reporting period, street sweeping operations kept 168 tons of debris out of the storm system. In addition, grated inlets are cleaned every other month, with records tracked in GIS. Use of salt brine for pre-treatment resulted in a reduction of 277.8 tons of salt as a deicer. Staff in various departments continues to rotate on a two- to three-year training schedule to help expose many employees to the O&M program, as well as more site-specific training with applicable staff. At the Public Works facility, the use of a vehicle/equipment wash bay and hydrodynamic separator treats runoff from the three-acre yard and reduces debris and sediment before leaving the site. Public concerns from the City's Concern Hotline are tracked on the City's WebQA concern system.

List of any additional programmatic BMPs added to the SWMP (i.e. programmatic BMPs include new training program, adopting a standard operating procedure for equipment cleaning, etc.)
Not at this time. However, modifications to training schedules and BMPs are being included in updates to the O&M Program Manual.

3. Notice that the City is Relying on Another Government Entity to Satisfy Permit Obligations (if applicable)

Name of Government Entity:	N/A	Contact Info:						
Primary Contact:		Specific BMPs or MCMs Entity Implements:						

4. Summary of Stormwater Activities & Known Construction Activities Scheduled to Begin During the Next Reporting Period

All BMPs/tasks mentioned above will continue to be implemented. The Stormwater Division continues to use CCTV equipment for infrastructure preventative maintenance. This helps to identify infrastructure conditions and maintenance needs. Annual refresher training for chemical spill response training is slated for 2022. Responsible personnel have the goal of conducting their department's O&M inspections at municipal facilities at least once annually. During the next reporting period, the O&M Program Manual will be updated to reflect new permit requirements.

5. Changes to the SWMP, BMPs or Measurable Goals and the Iterative Processes that Occurred

The O&M Program was reviewed with regards to the BMPs tracked above to evaluate their effectiveness and implementation.
EVALUATE – Were pollutants observed from concerns and inspection/maintenance logs the same as those targeted by procedures and training BMPs? **NO**
EFFECTIVE - Y or N? If no, change SOPs, schedules and/or training strategies based on types of concerns received and inspection observations/results to prevent or minimize water quality impacts. Re-evaluate. If yes, keep target pollutants, procedures and trainings. **NO**
CHANGES – Are implementation procedures or BMPs updates required? **YES**

Were changes made and noted?
YES. The BMPs listed above and in the SWMP were modified from the previous permit cycle to address new MS4 permit compliance metrics. In addition, a SWPPP was created for new municipal operations at the Water Reclamation Center. Major changes for this MCM include 1) updating and rebranding the O&M Manual, 2) modifications to define which staff are pertinent to employee training as defined in the new permit, and 3) refining adaptive management strategies.

6. List of BMPs Evaluated and How BMPs were Determined Effective

Date of Review(s): 2/12/2021, 4/28/2021, 6/14/2021, 11/15/2021, 12/6/2021, 1/13/2022
Reviewer: Jamie Paige, Greg Wallace, Ryan Peasel, O&M Responsible Parties

BMPs EVALUATED:
All BMPs, Implementation procedures, training, observations from inspection and maintenance logs and feedback from staff and the public were evaluated to determine compliance with new MS4 permit conditions and to assess the effectiveness of the O&M Program. Input was received through training seminars, inspection forms, SWPPP development for the Water Reclamation Center, and each responsible party's reviews of the O&M Manual, etc.

Staff completed the iterative process in Section 5 above to assess the effectiveness of each of the BMPs. All BMPs were evaluated and determined to be effective as measurable goals are being met, or on track with accomplishments listed. In 2021, the O&M Program Manual was reviewed and deemed appropriate to reflect municipal properties, personnel and pollution prevention BMPs. This review included inspections at municipal locations and discussions with supervisors to ensure it covered all pertinent aspects of their department. To compliment the new NPDES permit for the Water Reclamation Center, a new SWPPP was developed specifically for this location. Further, interdepartmental training was offered for each department's staff as an opportunity for collaboration and learning about how each division approaches material handling, pollution prevention and spill response. This especially increased comprehension for new staff of the SWMP, O&M Program, inspection and reporting requirements. Qualitative comments after training and quantitative accomplishments such as salt reduction and street sweeping debris provided confirmation that the BMPs are appropriate and successful in reaching target audiences and target pollutants. New online tools and resources will be explored for easier scheduling and tracking of training activities across departments.

Section C.

City of Wentzville
Municipal Boundary Map

Areas incorporated into Wentzville corporate limits
are shown on the attached map.
Data is updated as of 2/1/2022.

City of Wentzville Municipal Boundary

February 2022