



MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) BIENNIAL REPORT

January 1, 2019 – December 31, 2020



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Introduction

The City of Excelsior Springs received its first Municipal Separate Storm Sewer Permit in 2007 (MO R-040074). This permit was renewed in 2008 and again April 1, 2017. This report provides information regarding compliance activities that took place from January 2019 through December 2020. It is intended to showcase the progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). This report directly relates to the information required under Part C of the MS4 Stormwater Management Plan Report form from MDNR (MO 780-1846).

4.2.1 Public Education and Outreach of Stormwater Impacts

1. Status of compliance

The City of Excelsior Springs has implemented a public education program to distribute educational material to the community and conduct outreach activities about the impact of stormwater discharges on waterbodies and steps the public can take to reduce pollutants in the stormwater runoff. The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has nearly fully implemented the goals outlined in their SWMP for this minimum control measure. Some of the goals were not completed due to limitations caused by the 2020 Covid-19 pandemic.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local public outreach and education program.

4. Summary of activities covered scheduled for next reporting period

The City of Excelsior Springs will continue their public outreach and education program as described in their SWMP and outlined below:

- Stormwater information will be available on the City web site
- Posts about stormwater quality topics will be placed quarterly on the Stormwater Quality Facebook page
- HHW can be dropped off by residents at a variety of KC metro mobile and permanent locations; City of Excelsior Springs will continue to promote this program

- Dog Waste Disposal Program with the Parks Department will continue
- MARC brochures will be distributed at Hall of Waters and Public Works as in the past, but this will not be intended to meet the new permit requirements
- The MARC biennial water quality attitude survey will be reviewed when it becomes available (possibly February 2021).

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

- MARC information was available on their web site and linked from the City's stormwater information page (checked that all links still active end 2020). In 2019, this resulted in 5047 hits to the main public works web page, 341 hits to the stormwater quality page, 396 hits to the stormwater resources page and 359 hits to the waterways page. It also resulted in 135 downloads on information about how to design a rain garden, 115 downloads about rain garden plantings, 279 downloads of general stormwater management information and 52 downloads of the stormwater ordinances. In 2020, this resulted in 3,453 hits to the main public works web page, 202 hits to the stormwater quality page, 136 hits to the stormwater resources page and 249 hits to the waterways page. It also resulted in 123 downloads on information about how to design a rain garden, 52 downloads about rain garden plantings, 4 downloads of general stormwater management information and 26 downloads of the stormwater ordinances.
- In spring and early summer 2019, the MARC DVD "What is a watershed?" ran for two months on the local cable access channel.
- Household hazardous waste was dropped off at a variety of mobile locations and at permanent facilities in the Kansas City metro area. Residents of Excelsior Springs dropped off 8935 pounds in 2019 and 9125 pounds in 2020 at these various locations. The MARC Solid Waste Management District which tracks this information for all the participating communities said that they had seen a 36% reduction in pounds of waste collected and 38% fewer cars at mobile pickup locations, so it is impressive that Excelsior Springs residents actually had increased HHW recycling despite the pandemic.

- Placed 2 articles in local newspaper. In the spring of 2019, the article focused on proper use of yard chemicals and pesticides. In the fall of 2020, the article focused on proper yard waste management. Additionally, an advertisement for a proposed stream cleanup was run in the fall of 2020.
- Continued Dog Waste Disposal Program with the Parks Department. With the opening of a new dog park in 2019, four additional dog waste stations were added. Approximately 4000 bags were purchased in 2020. Staff has noticed a decrease in waste on the parks grounds since installing the waste stations.
- Stormwater related information was available on City website and Stormwater Facebook page. In 2019, this resulted in 158 likes, 17 comments on Facebook posts. In 2020, this resulted in 86 likes and 3 comments on Facebook posts. In the next reporting period, staff will improve documentation on the dates these posts are made, the stormwater topics covered, and the impressions received.
- In 2019, mailed 26 detention basin owners information regarding required inspections and maintenance of their facilities.
- Distributed MARC water quality brochures at Hall of Waters and Public Works. Also had a table with brochures at the Touch a Truck event in 2019.



Photo Caption: Stormwater info table at "Touch a Truck 2019"

7. Sampling: No sampling completed.

4.2.2 Public Involvement and Participation

1. Status of compliance

The City of Excelsior Springs has implemented a public involvement/participation program to provide opportunities for the community to be involved with the development and oversight of the SWMP. The City of Excelsior Springs has complied with state and local public notice requirements when implementing the public involvement/participation program.

The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has fully implemented the goals outlined in their SWMP for this minimum control measure.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local public involvement and participation program.

4. Summary of activities covered scheduled for next reporting period

The City of Excelsior Springs will continue their public involvement/participation program as described in their SWMP and outlined below:

- Continue to provide opportunities for volunteers to do storm drain stenciling
- Continue to provide opportunities for volunteers to do litter pickup events
- Continue to provide opportunities for volunteers to do stream cleanup events
- Continue to request input on stormwater issues at weekly Public Works foreman's meetings and weekly Department Heads meetings Continue to request public input through the city web page and stormwater Facebook page and provided link to MARC Web to provide information on how the public can be involved in stormwater quality

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

- On February 4, 2019, the revisions to the last SWMP were discussed at a public meeting. The revised SWMP had been put up on the City web site prior to this meeting and requested public input. None was received.
- In April 2019, Parks and Recreation held an Earth Day stream cleanup where 716 volunteers collected 148 bags of trash, 19 tires and 4 large bulky items (ie. Couch, mattress, etc.) from multiple watersheds around town.



Photo caption: Volunteers from Earth Day 2019 Stream Cleanup

- Also, in April 2019, an Eagle Scout project included a six-hour cleanup on the Fishing River where 17 volunteers with Troop 309 cleaned up 34 bags of trash and 2 tires.



Photo Caption: Troop 309 Eagle Scout Project Stream Cleanup

- In September 2019, a visiting group performed a cleanup on East Fork and Dry Fork of the Fishing River where 17 bags of trash and several bulky items were picked up by approximately 25 volunteers.



Photo Caption: September 2019 Stream Cleanup Volunteers

- In October 2020, a Stream Cleanup was advertised by the City. The advertisement requested that people sign up to participate so that sufficient cleanup supplies were available. Due to the pandemic, no one signed up and the event was not held.
- An Eagle Scout approached the City in early March 2020 about doing a storm drain marking project, but this project was put on hold due to the pandemic.
- Weekly Public Works foreman's meetings (12 employees) and weekly Department Heads meetings (11 employees typically) held stormwater discussions and input on the program was requested. While the opportunity to provide public input is available at these meetings, minimal input was received.
- Requested public input through the city web page and stormwater Facebook page and provided link to MARC Web to provide information on how the public can be involved in stormwater quality.
- City of Excelsior Springs invited public input through open public comment periods at all regular City Council meetings and discussion of development and redevelopment issues as they relate to stormwater at Planning and Zoning hearings. In 2019, 20 regular City Council meetings and 10 Planning and Zoning hearings were held. In 2020, 23 regular City Council meetings and 8 Planning and Zoning hearings were held. During the August 2019 meeting, the open

stormwater coordinator position was discussed. During a meeting in January 2020, a plat discussion was tabled pending stormwater quality review.

7. Sampling: No sampling completed.

4.2.3 Illicit Discharge Detection and Elimination

1. Status of compliance

The City of Excelsior Springs has developed, implemented, and currently enforces a program to detect and eliminate illicit discharges into their Small MS4. The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has fully implemented the goals outlined in their SWMP for this minimum control measure.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local IDDE program.

4. Summary of activities covered scheduled for next reporting period

- Continue to update the base map of MS4 and plot outfalls based on the updated definition
- Continue to inspect sanitary sewers for potential for exfiltration of waste that could impact the City's MS4.
- Continue dry weather field screening of outfalls
- Continue to follow the ERP if illicit discharges are found during dry weather field screening or reported by staff or the public.
- Continue storm drain marking program and associated public education.
- Continue to encourage proper disposal of HHW.

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

The City of Excelsior Springs continued their IDDE program as described in their SWMP and outlined below:

- The map of the MS4 was updated as new facilities were constructed or older systems were rehabbed. Additionally, on occasion, field data verifications required minor revisions to the data.
- Sanitary sewers were inspected for potential for exfiltration of waste that could impact the City's MS4. In 2019, sanitary sewers were inspected but length of CCTV work was not tracked. In 2020: 10,915 feet of sewer lines were inspected.
- Dry weather field screening was completed in 2019 on 41 major outfalls and in 2020 on 41 major outfalls. In 2020, an odor was detected and traced to a private detention basin. The owner was notified, issued a written warning, and worked with the City to immediately rectify the situation.
- In late 2020, the City's stormwater consultant provided guidance to the GIS coordinator to work on remapping the City's stormwater outfalls based on the most recent definition and MDNR guidance on the matter. This map will be completed during the next reporting period.
- In 2019, a property owner was sent a flyer about yard waste management and notified to clean up poorly managed waste. The owner corrected the issue without more formal enforcement actions.
- In 2019, Waller Trucking had odor from their detention basin. The site was sampled by the owner and found not to be an illicit discharge.

7. Sampling: No sampling.

4.2.4 Construction Site Stormwater Runoff Control

1. Status of compliance

The City of Excelsior Springs has developed, implemented, and currently enforces a program to reduce pollutants in any stormwater runoff to their Small MS4 from construction activities that result in land disturbance of greater than or equal to one acre and any smaller land disturbances if part of a greater plan or sale that would exceed the one-acre threshold in aggregate.

The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has fully implemented the goals outlined in their SWMP for this minimum control measure.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local construction site runoff control program.

4. Summary of activities covered scheduled for next reporting period

The City of Excelsior Springs will continue their construction site runoff control program as described in their SWMP and outlined below:

- Continue pre-construction plan review of new and redevelopment projects disturbing more than one acre ensuring that selected BMPs are appropriate for the site. The contracted plan reviewer will continue to follow established procedures for plan review via a plan review checklist.
- Continue to receive and log any public input on construction site runoff control. Staff will investigate potential issues and take any enforcement actions necessary.
- Continue to take enforcement actions as necessary to ensure proper construction site runoff control on applicable sites.

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

The City of Excelsior Springs continued their construction site runoff control program as described in their SWMP and outlined below:

- During the time period of January 2019 to December 2020 the following inspections, violations, and investigations are as follows.
- Residential= 15 permits; 68 inspections (2019); 11 violations (2019)
23 permits; 57 inspections (2020); 19 violations (2020)

Commercial= 1 permit; 43 inspections (2019); 7 violations (2019)
4 permits; 40 inspections (2020); 7 violations (2020)

- Continued to have opportunities for the public to provide input on construction site runoff control through advertisement of the contact information. No public input was received. Staff believes that this is one sign of a very effective construction site operator education program to reduce issues with trackoff and other construction site issues.
- Continued to take enforcement actions as necessary to ensure proper construction site runoff control on applicable sites. All violations found during this reporting period were corrected after providing verbal warnings to the contractors.



Photo Caption: Construction Site BMP at Elementary School Construction Site



Photo Caption: Construction Site BMPs at 69 Storage Construction Site

7. Sampling: No sampling.

4.2.5 Post-Construction Stormwater Management in New Development and Redevelopment

1. Status of compliance

The City of Excelsior Springs has developed, implemented, and currently enforces a program to address the long-term stormwater runoff new and redevelopment projects that result in land disturbance of greater than or equal to one acre and any smaller land disturbances if part of a greater plan or sale that would exceed the one-acre threshold in aggregate. This program has been designed and is working to prevent/minimize water quality impacts of these projects.

The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has fully implemented the goals outlined in their SWMP for this minimum control measure.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local post-construction water quality program.

4. Summary of activities covered scheduled for next reporting period

The City of Excelsior Springs will continue their post-construction stormwater control program as described in their SWMP and outlined below:

- Continue to utilize the various requirements for quantity and quality control on new and redevelopment projects found within the municipal codes and stormwater ordinances as well as the design criteria located in KC APWA Section 5600 Stormwater Design Criteria and KC APWA/MARC Manual of Best Management Practices for Stormwater Quality.
- Continue to require long term operation and maintenance of post-construction BMPs through the execution of recorded maintenance covenants and an annual inspection of all existing BMPs.
- Update list of post-construction BMPs as new ones are constructed.

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

The City of Excelsior Springs continued their post-construction site runoff control program as described in their SWMP and outlined below:

- Continued to utilize the various requirements for quantity and quality control on new and redevelopment projects found within the municipal codes and stormwater ordinances as well as the design criteria located in KC APWA Section 5600 Stormwater Design Criteria and KC APWA/MARC Manual of Best Management Practices for Stormwater Quality. Five plans for new or redevelopment were reviewed by a third party, resulting in 5 permits issued and 8 post-construction BMPs constructed. Maintenance agreements were recorded on three of these projects with the fourth one pending at the time of this report.



Photo Caption: Newly constructed detention basin with native grasses in bottom

- Updated the list of privately held basins in 2020.
- Continued to require long term operation and maintenance of post-construction BMPs through the execution of recorded maintenance covenants and an annual inspection of all existing BMPs.

- Inspected all 41 existing detention basins in 2019 with no violations and 43 basins in 2020 with 1 violation. Tree House Foods was issued a notice of violation for lack of maintenance causing odors. All corrections have been made to the basin and the basin is functioning correctly.



Photo Caption: Detention basin inspection photo

7. Sampling: No sampling.

4.2.6 Pollution Prevention/Good Housekeeping in Municipal Operations

1. Status of compliance

The City of Excelsior Springs has developed and continues to work to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The program goals were evaluated as part of the preparation for this report based on the measurable goals listed below and found to be creating progress toward the statutory goal of reducing the discharge of pollutants to the MS4 to the maximum extent practicable (MEP).

2. Progress towards statutory goal of reducing discharge of pollutants

The City of Excelsior Springs has fully implemented the goals outlined in their SWMP for this minimum control measure.

3. Other governmental entities involved

The City participates in the MARC Water Quality Program and utilizes their services to augment their local good housekeeping in municipal operations program.

4. Summary of activities covered scheduled for next reporting period

The City of Excelsior Springs will continue their good housekeeping in municipal operations program as described in their SWMP and outlined below:

- Continue to provide employee training on stormwater quality protection and review the program for any needed changes
- Continue to perform maintenance activities on the MS4
- Continue to inspect catch basins/inlets for pollution and maintenance issues
- Continue to sweep streets to reduce pollutant loads
- Continue to utilize SOPs for good housekeeping at city maintenance facilities
- Perform inspections of city maintenance facilities.
- Continue to dispose of waste from the MS4 and other maintenance activities appropriately.
- Continue to review flood control projects for potential water quality impacts

5. Changes to SWMP

No changes are deemed necessary at this time. The City of Excelsior Springs will be rewriting their SWMP in the fourth quarter of 2021 to better address the updated/new permit requirements under the comprehensive permit that will be issued in October 2021.

6. BMPs evaluated and measure of effectiveness:

The City of Excelsior Springs continued their post-construction site runoff control program as described in their SWMP and outlined below:

- Continued to provide employee training on stormwater quality protection. In 2019, 26 public works employees were trained on the SOPs. In 2020, 22 public works employees were trained on the SOPs. In 2019, 5 parks employees received training on the SOPs. In 2019, two employees attended the training held at the Missouri Floodplain and Stormwater Managers Association conference (which was not held in 2020 due to the pandemic). In August 2019, the stormwater coordinator attended a 2-day online training through the American Stormwater Institute on stormwater and erosion/sediment control inspections. He now holds their certifications in those areas.
- Continued to perform maintenance activities on the MS4. Storm drains are repaired yearly as issues arise. Largest repair was on a collapsed 36" pipe where

280 LF had to be replaced in early 2020. Multiple minor ditch erosion repairs. Storm drains are routinely cleaned after each rain event. Over 400 drains.

- Continued to sweep streets to reduce pollutant loads. 756 lane miles were swept in 2019 and 851 land miles were swept in 2020. Sweeping is performed every 2-3 weeks weather permitting.
- Maintained grit chambers in Maintenance Barns and Car Wash twice each year (March and September).
- Continued to dispose of waste from the MS4 and other maintenance activities appropriately.
- Tires picked up on City right-of-way are stored in a shipping container (enclosed/under cover) until the recycler can pick them up. In total, 486 tires were recycled by Black Gold Rubber Recyclers during this reporting period.
- In 2019, 387 bags of litter were collected from city rights-of-way by public works staff. In 2020, 326 bags of litter were collected from city rights-of-way. Note that inmates are no longer being used for this due to the pandemic and staff numbers have also been reduced. It is unclear when or if this will return to “normal” in the next reporting period.
- Performed inspections of City maintenance facilities in 2019.



Photo Caption: Rain garden upstream of Century Lake

7. Sampling: No sampling.