

September 7, 2017

Mr. Michael Abbott  
Municipal Storm Water Program Coordinator  
Missouri Department of Natural Resources  
Water Pollution Control Branch  
Lewis & Clark State Office Building  
1101 Riverside Drive  
Jefferson City, MO 65101

**Re: Hannibal, MO (MO-R040060) SWMP Report (June 13-December 31, 2016)**

Dear Mr. Abbott,

Please find the following attached documents:

1. SWMP Report Form 780-1846
2. City of Hannibal SWMP Report

As discussed in the attached report, the Hannibal Board of Public Works has assumed responsibility for administration of the MS4 permit. Please copy Mr. Robert Stevenson, or his future designee, on all MS4 related correspondence.

If you require any additional information, please do not hesitate to contact me at (573) 406-0541, or by email at [keving@psba.com](mailto:keving@psba.com).

Respectfully,



Kevin W. Garnett, P.E.  
Project Engineer

Attachments

Cc: Matt Munzlinger, Hannibal Board of Public Works



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 City of Hannibal	2. NPDES PERMIT NUMBER MO-R040060	3. MS4 UNIQUE ID NO.	
4. ADDRESS 320 Broadway	5. CITY Hannibal	6. STATE MO	7. ZIP CODE 63401
8. TELEPHONE NUMBER WITH AREA CODE 573-221-0111	9. EMAIL bchaplin@hannibal-mo.com/mmunzlinger@hannibalbpw.org		
10. NAME OF MS4 CONTACT PERSON Brian Chaplin (previous)/Matt Munzlinger (current)			
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?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: June 13, 2016  ENDING: December 31, 2016

**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?
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> 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.

**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)	
<i>RVV &lt;5.-t:ioAA04--.</i>	DATE SIGNED <i>2 / 6 / 7-oJ 7</i>
NAME (PRINTED OR TYPED)	TITLE
<i>f&lt;CJerf 51-ev ftl S CO v\</i>	<i>C -eVl. rrl,::;n 4 ""-Pa</i>

INDIVIDUAL SMALL MS4  
STORMWATER MANAGEMENT PROGRAM REPORT  
City of Hannibal, Missouri  
Reporting Period: June 13, 2016 – December 31, 2016

September 2017

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## I. Status of Compliance Conditions

On August 2, 2017, a meeting was held between representatives of the Hannibal Board of Public Works (HBPW), Poepping, Stone, Bach and Associates (PSBA) and the Missouri Department of Natural Resources, MS4 program (DNR) to discuss Hannibal's MS4 compliance. As discussed at this meeting, for various reasons, the City of Hannibal has made very little progress in meeting the goals set out in the most recent Stormwater Management Plan (SWMP) dated April 2013. Appendix A shows the stormwater related activities carried out by HBPW between June 13, 2016 and December 31, 2016. It should be noted that HBPW did not have responsibility for stormwater during this timeframe, but provided assistance to the Department of Public Works, who had this responsibility. To date, the Department of Public Works has been unable to produce any records of MS4 related activities for this reporting period.

Due to ongoing stormwater related issues, the City of Hannibal (City) has made the decision transfer responsibility for the implementation of the MS4 permit to HBPW as discussed below. It is anticipated that this transfer will result in marked improvement in compliance with the conditions of the MS4 Permit.

## II. MS4 Permit Implementation Changes

Much of the stormwater infrastructure in the City was built prior to implementation of any current standards, and was privately constructed and owned with little to no coordination with or input by the City. Many of these systems are inadequately sized or constructed and have been failing at an increasing rate. The City has identified the need for a comprehensive stormwater initiative to address these issues and improve stormwater control throughout the City. As such, on June 6, 2017 the Hannibal City Council adopted Resolution No. 2092-17 (see Appendix B), authorizing and directing HBPW to establish a stormwater utility and comprehensive stormwater repair program. Additionally, this Resolution authorized and directed HBPW to assume responsibility for the City's MS4 permit.

HBPW immediately began work to develop a plan and budget, which were approved on July 25, 2017 by their Board of Directors. Included in this approved plan were a \$1 Million inter-fund loan from the Electric Fund to the Stormwater Fund to fund stormwater activities. HBPW has advertised for a Stormwater Coordinator and plans to advertise for a Stormwater Manager position in the near future. HBPW has contracted with PSBA to assist them with this transition, as well as contracting with other consulting firms for assistance in developing a stormwater utility. Section III below provides a summary of planned stormwater activities for the next reporting period.

## III. Summary of Future Activities

As noted above, HBPW is in the early stages of developing a stormwater utility as directed by the Hannibal City Council. This work includes drafting ordinances and policy documents related to the implementation and operation of said stormwater utility, development of rate structures, and initial staffing. It has been estimated that HBPW will not begin receiving revenue from stormwater user fees until the Fall of 2018. In the interim, stormwater activities will be funded by the inter-fund loan discussed above.

As was discussed in the August 2 meeting with DNR, the current MS4 Permit was issued effective October 1, 2016. As a condition of this Permit, the current SWMP is to be updated to

reflect the current Permit conditions, and submitted to DNR by October 1, 2017. This updated SWMP will then serve as the roadmap to direct HBPW's implementation of the City's MS4 Permit. The SWMP will be updated as soon as possible, however a request for an extension of this deadline will likely be submitted. The updated SWMP will include more attainable, well defined goals for implementation of each Best Management Practice (BMP) and Minimum Control Measure (MCM).

HBPW plans to begin by focusing on MCM 1 (Public Education), 2 (Public Involvement), and 3 (Detection and Elimination of Illicit Discharges). The City has had previous success with activities related to MCM's 1 and 2, many of which are ongoing, however, no records of these activities have been maintained. This has included activities such as the Hannibal Stream Team, stream cleanup days, city wide cleanup days, storm drain stenciling, and education and outreach on yard waste, pet waste, and fertilizer application. HBPW plans to utilize their existing tracking systems to more accurately record these activities and retain those records for future reporting. Use of social media for public education and involvement has also been discussed.

A draft ordinance regarding illicit discharges was developed by PSBA in 2013, but no further action was taken by the City. This draft ordinance will be revised and sent to the City Council to bring the City's Illicit Discharge ordinance in line with permit conditions. This will include clearly defining the responsibilities for the implementation and the enforcement of the ordinance. Additionally, all of Chapter 9 of the Code of Ordinances will be revised to clarify that the responsibility for stormwater related issues (with the possible exception of the Flood Plain Management Program) lies with HBPW as directed by the City and replacing references to the City Engineer or the Department of Public Works with references to the HBPW General Manager, Stormwater Manager, or HBPW where appropriate. HBPW will begin efforts to locate and map all stormwater conveyances and integrate this mapping into an existing utility GIS. This mapping work may be done in conjunction with inspection/evaluation of existing stormwater infrastructure and periodic inspections of detention structures as required by City Code and with dry-weather inspections as required by the Permit.

Good housekeeping practices for municipal department/activities and training of City staff will be targeted as part of MCM 6. This will include developing daily logs to record street sweeping activities, and documenting training of all City staff on the importance of pollution prevention, reporting of illicit discharges, and general good housekeeping principles to prevent pollution of stormwater. A review of all City Departments and activities will be conducted to determine what areas have the greatest potential to pollute, and maintenance schedules will be developed based on this review

Construction Site Activities (MCM 4) and Post Construction Activities (MCM 5) will also begin to be addressed in the next reporting period. The revisions to Chapter 9 of the Code of Ordinances discussed above will impact these MCM's as well. This will include clearly defining the responsibilities for review, inspections, and enforcement. Construction site and post construction inspections will be logged using HBPW's existing tracking system. A series of erosion and sediment control standards, including BMP details and specifications, will be developed and maintained similar to the Design Criteria for Sanitary Sewer and Water Systems currently maintained by HBPW. This will allow for more adequate enforcement measures and will aid in the iterative process of evaluating, revising and re-evaluating BMP's for construction and post-construction activities. Additionally, HBPW will consider demonstration projects using



selected water quality BMP's on both municipal and private developments as a method to both evaluate the effectiveness of specific BMP's and to educate developers, contractors, and consultants on BMP selection, installation, and maintenance.

Additional details, including descriptions, methods of measurement/evaluation, and schedules for implementation of the above activities will be included in the updated SWMP. This updated SWMP will be drafted soon, then submitted to DNR after a short "trial period" to allow for adjustment of goals and timeframes as necessary. Additional revisions to the SWMP may be necessary as the process of developing a stormwater utility moves forward.

**Appendix A:**  
**Hannibal Board of Public Works Storm Water Work Orders**

Hannibal Board of Public Works  
Storm Sewer Related SO

SO#: 123306



**SERVICE MAP LOCATION:**

**Taken By:** mmunzlin

**Date Taken:** 09/28/2016

**Needed Before:** 9/28/16 12:00:00 AM

**CUSTOMER INFORMATION**

<b>Mailing Address:</b>	<b>Account:</b>	<b>Cycle:</b>
	<b>Customer:</b>	<b>Route:</b>
	<b>Home Phone:</b> NONE LISTED	<b>Mtr Seq:</b>
<b>Service Address:</b>	<b>Work Phone:</b> NONE LISTED	
	<b>Mobile Phone:</b> NONE LISTED	

**General Comments:** 100 Stevens Drive - Customer reported to Street Department that the storm sewer leaving the storm inlet in the street is causing her driveway to be undermined resulting in it collapsing. Please investigate by dye testing the hole and televising the storm sewer if necessary.

**Assessment/Field Comments:** TV. LINE 120 FT NO PROBLEMS WITH STORM SEWER AND CONTACTED CUSTOMER TO LET THEM KNOW - DYED SHOWED UP AROUND LID SO NEEDS HYDROLIC CEMENT PUT AROUND IT. FOR NOW - (JMD)

**Task Remarks:**

**Resource Information:**

<u>Task</u>	<u>Resource</u>
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Storm Sewer Related SO

**SERVICE MAP LOCATION:**



**Taken By:** mmunzlin

**Date Taken:** 10/07/2016

**Needed Before:** 10/7/16 12:00:00 AM

**CUSTOMER INFORMATION**

**Mailing Address:**

**Account:**

**Cycle:**

**Customer:**

**Route:**

**Mtr Seq:**

**Home Phone:** NONE LISTED

**Work Phone:** NONE LISTED

**Mobile Phone:** NONE LISTED

**Service Address:**

**General Comments:** Report of sink hole near intersection of Warren BalTett and 10th Sh-eet.

**Assessment/Field Comments:** DYED SINKHOLE INTO STORM DRAIN. INSTALLED PLATE OVER SINK HOLE. PUT COAL PATCH AROUND PLATE

TV-STORM SEWER NEXT TO SINK FOUND JOINTS SEPERATED POSSIBLE CASUE OF SINK  
**HOLW-(JMD)**

**Task Remarks:**

**Resource Information:**

Task	Resource
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**Job Completed:** By: \_\_\_\_\_ Date: \_\_\_\_\_ **On Computer:** By: \_\_\_\_\_ Date: \_\_\_\_\_

Storm Sewer Related SO

**SERVICE MAP LOCATION:**



**Taken By:** mmunzlin

**Date Taken:** 11/09/2016

**Needed Before:** 11/9/16 12:00:00 AM

**CUSTOMER INFORMATION**

<b>Mailing Address:</b>	<b>Account:</b>	<b>Cycle:</b>
	<b>Customer:</b>	<b>Route:</b>
<b>Service Address:</b>	<b>Home Phone:</b> NONE LISTED	<b>Mtr Seq:</b>
	<b>Work Phone:</b> NONE LISTED	
	<b>Mobile Phone:</b> NONE LISTED	

**General Comments:** Recieved call from Rich Dauma concerning a car that had drove through a st01m sewer inlet at Broadway and the Floodwall.

**Assessment/Field Comments:** PULLED ORATE OUT OF STORM SEWER AND PLACED BACK ON ORATE RING

**Task Remarks:**

**Resource Information:**

<b>Task</b>	<b>Resource</b>
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Storm Sewer Related SO

**SERVICE MAP LOCATION:**



**Taken By:** mmunzlin

**Date Taken:** 11/16/2016

**Needed Before:** 11/16/16 12:00:00 AM

**CUSTOMER INFORMATION**

<b>Mailing Address:</b>	<b>Account:</b> <b>Customer:</b>	<b>Cycle:</b> <b>Route:</b> <b>Mtr Seq:</b>
<b>Service Address:</b>	<b>Home Phone:</b> NONE LISTED <b>Work Phone:</b> NONE LISTED <b>Mobile Phone:</b> NONE LISTED	

**General Comments:** Grease and operate the valves on the floodwall that HBPW is responsible for.

**Assessment/Field Comments:** COMPLETE AS REQUESTED. 11-16-2016 EKTDS

**Task Remarks:**

**Resource Information:**

<u>Task</u>	<u>Resource</u>
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**Appendix B:**  
**City of Hannibal Resolution No. 2092-17**

**RESOLUTION NO. 2092-17**

**A RESOLUTION AUTHORIZING THE HANNIBAL BOARD OF PUBLIC WORKS TO IMPLEMENT A STORMWATER UTILITY AND COMPREHENSIVE STORMWATER REPAIR PROGRAM THEREOF IN HANNIBAL**

**WHEREAS**, the City of Hannibal is characterized by old stormwater infrastructure; much of it built prior to mandatory standards for stormwater detention, much of it inadequately-sized, and much privately constructed and owned, and

**WHEREAS**, an increasing rate of collapse of certain stormwater conveyance systems throughout Hannibal; many of which are private, presents a potential and actual hardship on Citizens of Hannibal, including potential problems for individual property owners, the Citizens as a whole, and also the potential for increased regulation or fines from the State or Federal government, and

**WHEREAS**, such hardships necessitate a comprehensive stormwater initiative to repair such systems and improve stormwater control throughout Hannibal, and

**WHEREAS**, Section 11.07 of the Home Rule Charter provides the Hannibal Board of Public Works with authority to "construct, manage, supervise and control the municipal electric, water systems, and wastewater treatment and collection system, artificial underground stormwater collection systems, and any future additions and improvements thereto", and

**WHEREAS**, Section 11.07 of the Home Rule Charter further provides the Hannibal Board of Public Works with "exclusive power and the duty to establish rates and provide for the assessment and collection of charges for municipal electric, water, or sanitary sewer system or other utilities", and while such underground stormwater collection systems are under their authority, the Board of Public Works has not previously been directed by the City Council to undertake the comprehensive management of such a system, and

**WHEREAS** it is the desire of the Mayor and City Council that a stormwater utility be established pursuant to existing Home Rule Charter provisions, and a comprehensive repair program implemented thereof, as the rate of collapse of large stormwater conveyance systems, and the general level of structural-unsoundness of said systems no longer permits this need to be viewed as a discretionary measure.

**NOW THEREFORE BE IT RESOLVED BY THE CITY OF HANNIBAL, MISSOURI:**

**SECTION ONE:** The Hannibal Board of Public Works is hereby authorized and directed to establish a stormwater utility pursuant to existing Home Rule Charter provisions, and a comprehensive stormwater repair program and initiative thereof to repair structurally-unsound stormwater infrastructure and address stormwater problems throughout the Hannibal community.



**SECTION TWO:** The Hannibal Board of Public Works is hereby authorized and directed to assume responsibility of the City's MS4 Permit as issued by the Missouri Department of Natural Resources.

**SECTION THREE:** The Hannibal Board of Public Works is hereby authorized and directed to acquire land and land rights in the name of the City as required to implement repair, construction, and compliance of the Stormwater System.

**SECTION FOUR:** This Resolution shall become effective immediately upon its adoption.

ADOPTED this 16<sup>th</sup> day of \_\_\_\_\_, 2017

APPROVED this 16<sup>th</sup> day of July, 2017

  
James R. Hark, Mayor

ATTEST:

lYtO() n, UW X&J?  
Angelica N. Zerbonia (MRCC, City Clerk