



MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OVERVIEW

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Environmental Quality & Public Works
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MS4 Defined

- Municipal Separate Storm Sewer System
- KRS 224 authorizes a community like Lexington to discharge stormwater runoff from its MS4 into “Waters of the Commonwealth”
- Lexington is issued a stormwater discharge permit by the Kentucky Department for Environmental Protection
- Permit requirements contained in federal law are applicable to “large MS4s” (Pop. 250,000 or greater) like Lexington



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FACT SHEET

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE FROM A LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM INTO WATERS OF THE COMMONWEALTH

KPDES No.: KYS000002 Permit Writer: Abigail Rains Date: May 1, 2015
AI No.: 74551

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant

Lexington-Fayette Urban County Government
200 East Main Street
Lexington, Kentucky 40507

b. Description of Applicant's Operation

The applicant operates a large municipal separate storm sewer system through such controls as legal authority, source identification, discharge characterization, management program, assessment of controls, and fiscal analysis.

2. PERMIT DURATION

Five (5) years

3. THE ADMINISTRATIVE RECORD

The Administrative Record, including application, draft permit, fact sheet, public notice, comments received, and additional information is available for review at the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

4. CONTACT

Abigail Rains
KPDES Permit Writer
(502) 564-3410, extension 4891



Why it Matters

Program intended to maintain and improve the quality of the state's waterways *by reducing the quantity of pollutants that stormwater picks up and carries into the MS4 during storm events*





MS4 Permit – Program Elements

Public Engagement

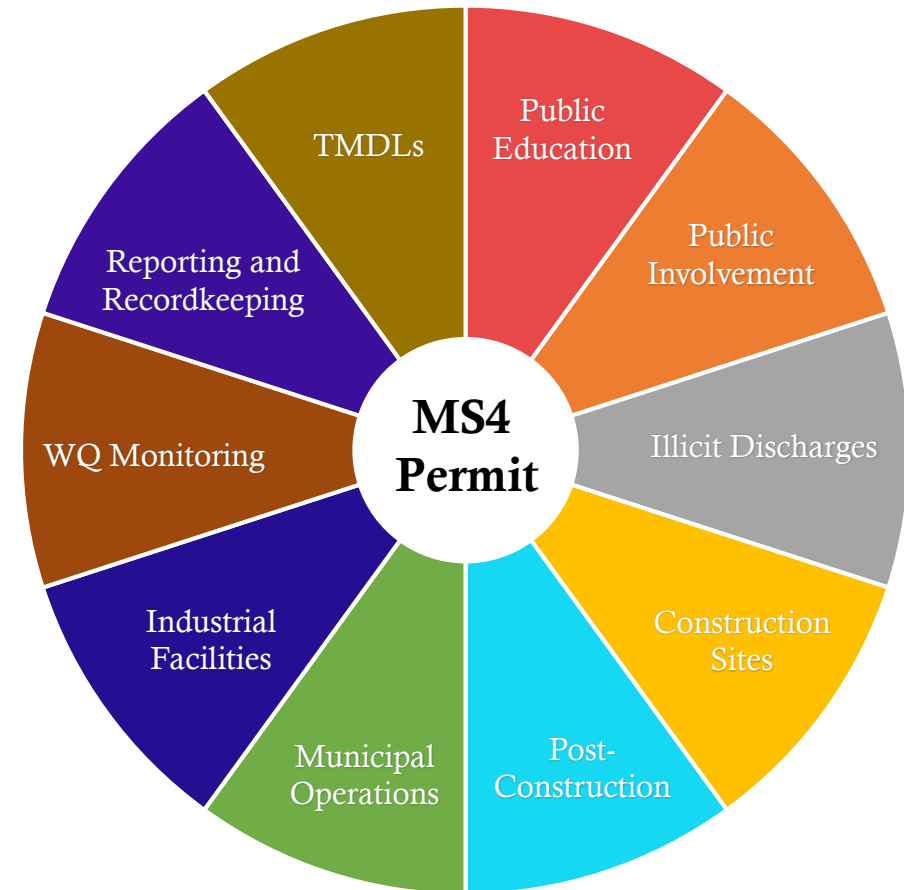
- 1 Public Education and Outreach
- 2 Public Involvement and Participation

Pollution Prevention

- 3 Illicit Discharge Detection and Elimination
- 4 Construction Site Stormwater Runoff Control
- 5 Post-Construction SW Management
- 6 Pollution Prevention for Municipal Operations
- 7 Industrial Facility SW Pollution Prevention

Monitoring and Reporting

- 8 Water Quality Monitoring
- 9 Reporting and Recordkeeping
- 10 Total Maximum Daily Loads/ Impaired Waters





Illicit Discharge Detection and Elimination

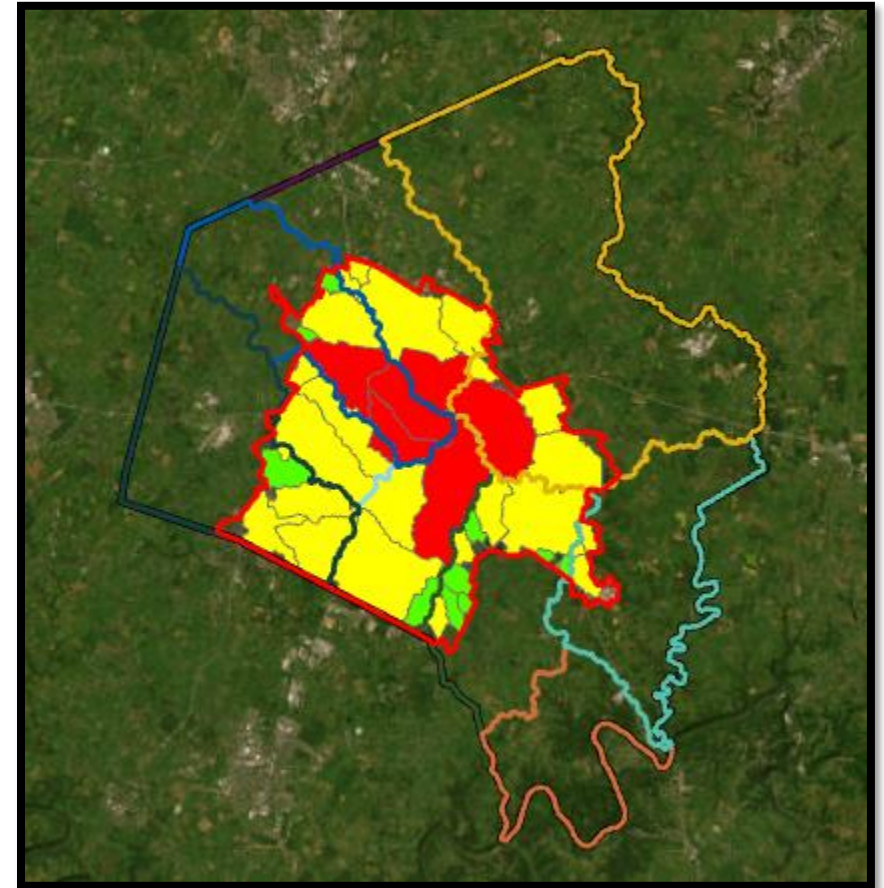
- Since 2009, Permit requires Dry Weather Screening at Major Outfalls
 - A pipe with a cross-sectional area greater than or equal to an inside diameter of 36-inches
 - A single conveyance with a drainage area more than 50 acres
 - A pipe system draining “industrial-zoned land use” with an inside diameter of 12-inches or greater
 - A single conveyance other than a pipe with an “industrial-zone land use” drainage area of more than 2 acres





Illicit Discharge Screening Factors

- Illicit Discharge Potential Criteria
 - Sanitary Sewer Repairs
 - Sanitary Sewer Defects
 - Population Density
 - High-Risk Commercial Facilities
 - Number of Outfalls
- Outfalls less than 36-inches
 - High, Medium and Low Priority
 - Frequency
- Other Phase I MS4's have adopted this practice.





Post-Construction Stormwater Management

	No.	Frequency	Inspections
Detention Basins	1,248	Semi-Annually	2,496
Retention Ponds	104	Quarterly	416
Private WQ BMPs	1,167	Annually	1,167
LFUCG WQ BMPs	96	Quarterly	384
Underground Detention Basins	135	Annually	135
Critical Culverts	49	Monthly	588
TOTAL	2,799		5,186



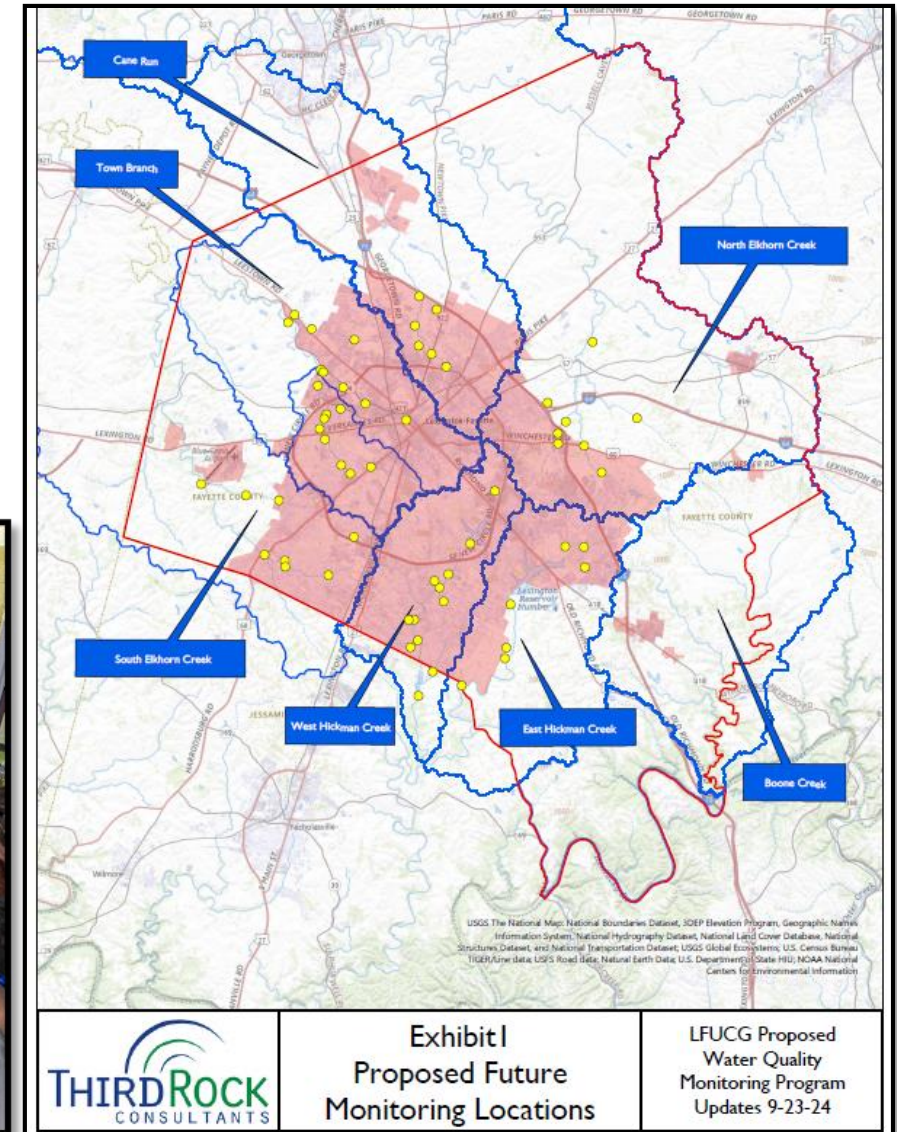
Comprehensive Maintenance Manual for Post-Construction Stormwater Controls is being developed. Expected publication is January 2026.





Water Quality Monitoring

- 12/20/2024 – Submitted Proposed Program to KDOW
- 1/10/2025 – Received Approval from KDOW
- County-Wide Program Includes:
 - Quarterly Grab Sampling - 64 Sites
 - Wet Weather Sampling
 - Macroinvertebrate Sampling
 - Stream Habitat Assessment
 - Geomorphic Assessment
 - Fish Sampling
 - Volunteer Participation



Questions?



LEXINGTON

