

Municipal Separate Storm Sewer System (MS4) Program Update

**Pursuing Illicit Discharges to
Resolve an Enforcement Action**

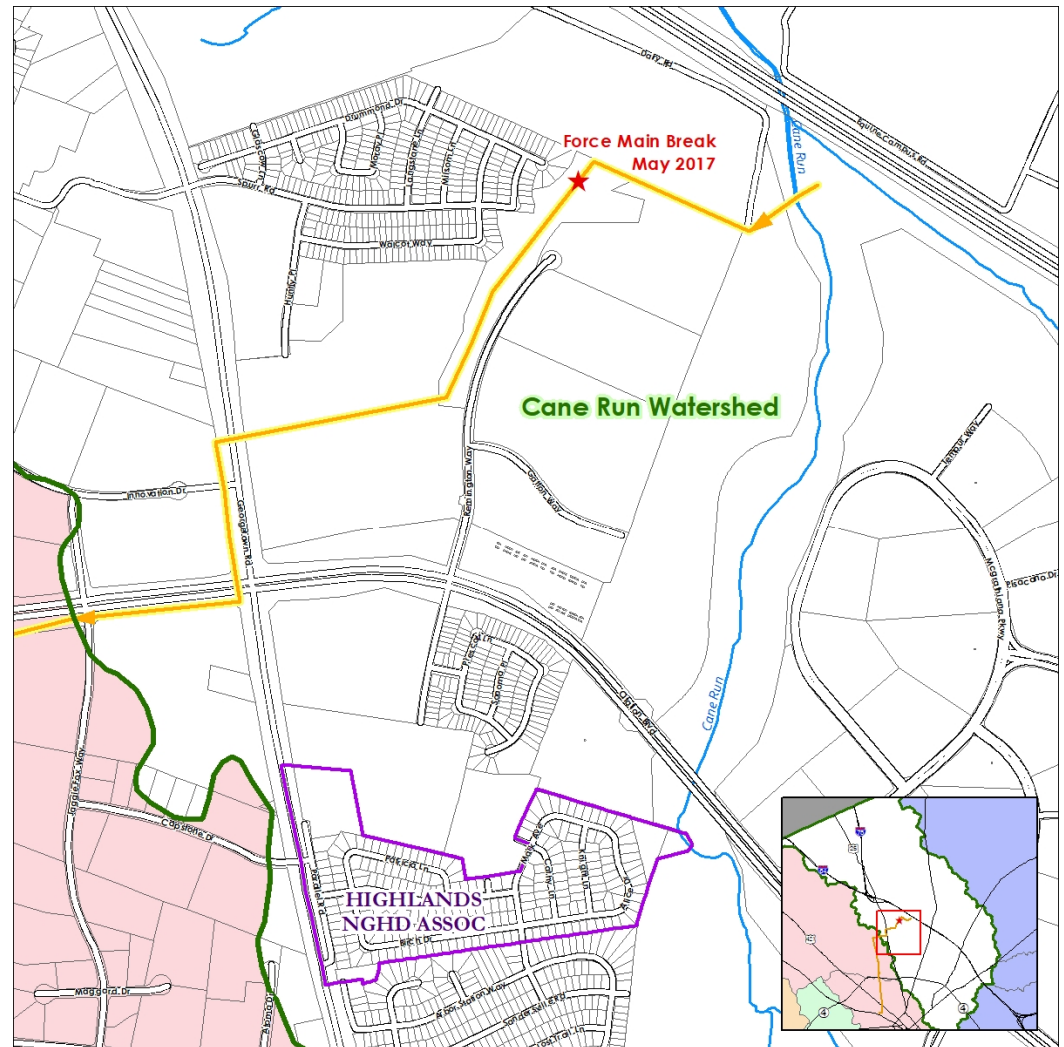
April 24, 2018



LEXINGTON

AGENDA

- Reason for the Update
 - Pending Enforcement Action
 - Permit Requirement
- DWQ's Recommendation
- Next Steps



Pending Enforcement Action

- In regard to intermittent releases of raw sewage from the broken Lower Cane Run Force Main during April and May 2017
- Council notifications provided:
 - Six throughout early May 2017
 - Final update on July 13, 2017
 - one still unresolved issue: the potential for a fine levied by state



Pending Enforcement Action

- State Enforcement Timeline:

| State Action | Date |
|----------------------|------------------|
| Notice of Violation | May 17, 2017 |
| Enforcement Referral | October 24, 2017 |
| Request to Appear | December 7, 2017 |

State's Enforcement Proposal

- Develop a written Standard Operating Procedure (SOP) to mitigate risks for future, similar incidents: **COMPLETE**
- Pay a penalty of \$17,500 or complete a Supplemental Environmental Project (SEP) with a minimum investment of \$35,000: **TODAY'S DISCUSSION**

DWQ's Evaluation of Potential SEPs

1. Must be environmentally beneficial and not required for compliance purposes.
2. Should be located in watershed where pipeline break occurred.

| Option | Risks? | Rewards? |
|----------------------------------|---|---|
| Stream Restoration | Private property conflicts / Long-term O&M obligation / Permitting effort substantial | Well known and documented. |
| Litter Management | Long-term O&M obligation / Technology limitations | Well known and documented. |
| Private Lateral Pilot Program | Private property conflicts / Creating and launching a new program as a SEP | Expected to provide water quality data to determine if this program should become a long-term initiative within the stormwater quality management program. |

DWQ's Recommendation: *Private Lateral Pilot Program SEP*



- Fund the investigation and repair / replacement of privately-owned sanitary sewer service laterals within the Highlands Subdivision.
 1. DWQ Contractors would conduct the investigations.
 2. Homeowners would contract with plumbers to make the repairs.
 3. DWQ would reimburse homeowners up to a reimbursement value based on the plumber's cost estimate.
- In the event of low participation within the project area, fund tree plantings at specific Parks locations within the Cane Run watershed.
- Spend a minimum of \$35,000 on the SEP.

Why Recommend This SEP?

Knowledge About the Neighborhood

- Homes built mid- to late-1950s
- Prevalence of Orangeburg pipe
- 2011 Sanitary Sewer Assessment found multiple properties with sewer defects via smoke testing

| Defect Details: Defect 7124 | | | |
|-----------------------------|------------------------------------|------------------------|----------------------|
| Address/Location: | 1932 ALICE DR | Runoff Potential: | Sheeting |
| Defect Type: | Hole In Ground | Smoke Rate: | Medium |
| Distance From US MH: | Downstream 187 ft | Drainage Area (sq ft): | < 500 |
| Distance Off Line: | Right 23 ft | Elevation: | At Grade |
| Date/Time: | 11/24/2010 / 8:49 AM | Surface Cover: | Grass / Open Area |
| Public/Private: | Private | | |
| Comments: | Smoking from holes at base of tree | | |
| Area Photo: | SD20101124EVAELD5110 | Zoom Photo: | SD20101124EVAELD5111 |

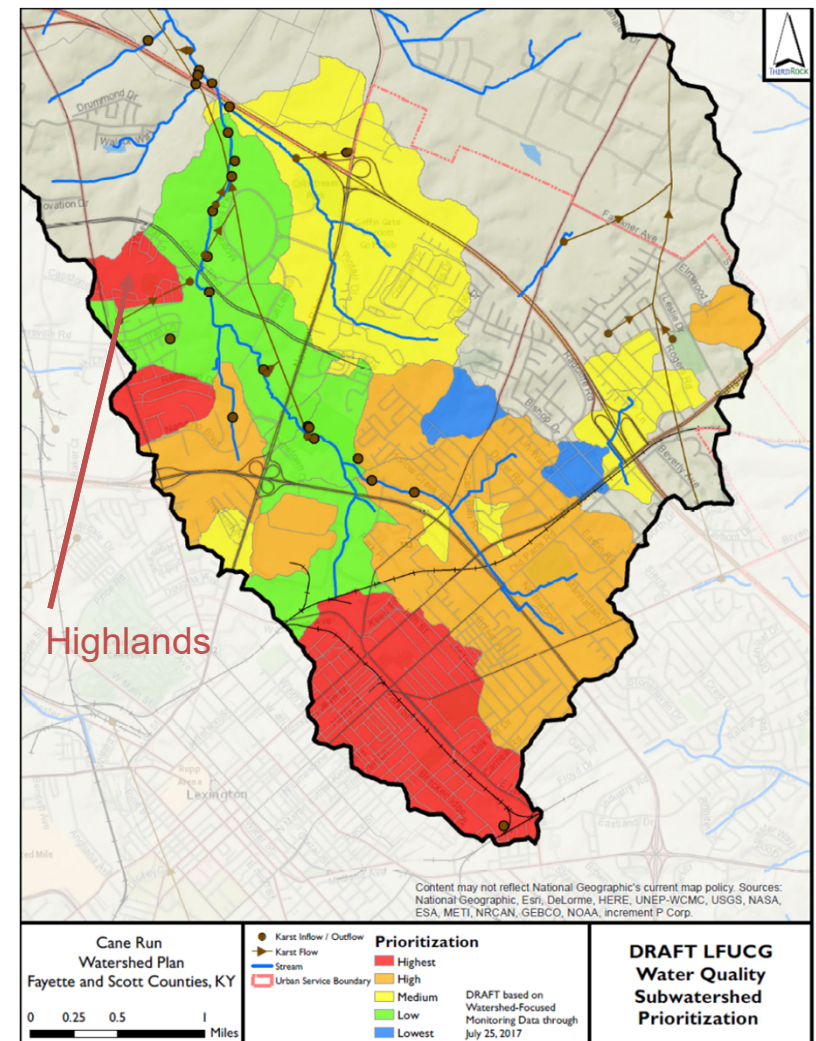




Why Recommend This SEP?

Watershed-Focused Monitoring Program Data

- Cane Run sampled from Fall 2016 through Summer 2017
- 14 monitoring events
- 10 events with flow at Highlands site
- *E. coli* - 100% of Highlands site samples above water quality criteria and benchmark (>1,000 to over 230,000 colonies/100mL)





Why Recommend This SEP?

Stormwater Stakeholder Advisory Committee's Input

| Category | % Contribution | % Resources |
|------------------------------|----------------|-------------|
| Human | 51 | 65 |
| Sanitary Sewer System | 23 | 27 |
| Private Lateral Lines | 15 | 24 |
| Other Human Waste | 13 | 14 |
| Animal | 39 | 27 |
| Livestock | 15 | 11 |
| Domestic Pets | 10 | 9 |
| Urban Waterfowl | 9 | 6 |
| Other Urban Wildlife | 4 | 2 |
| Environmental / Other | 10 | 8 |
| Litter and Dumpsters | 4 | 7 |
| Bed Sed. / Slimes / Biofilms | 5 | 2 |

Why Recommend This SEP?

SSAC's Input

2nd place

3rd place

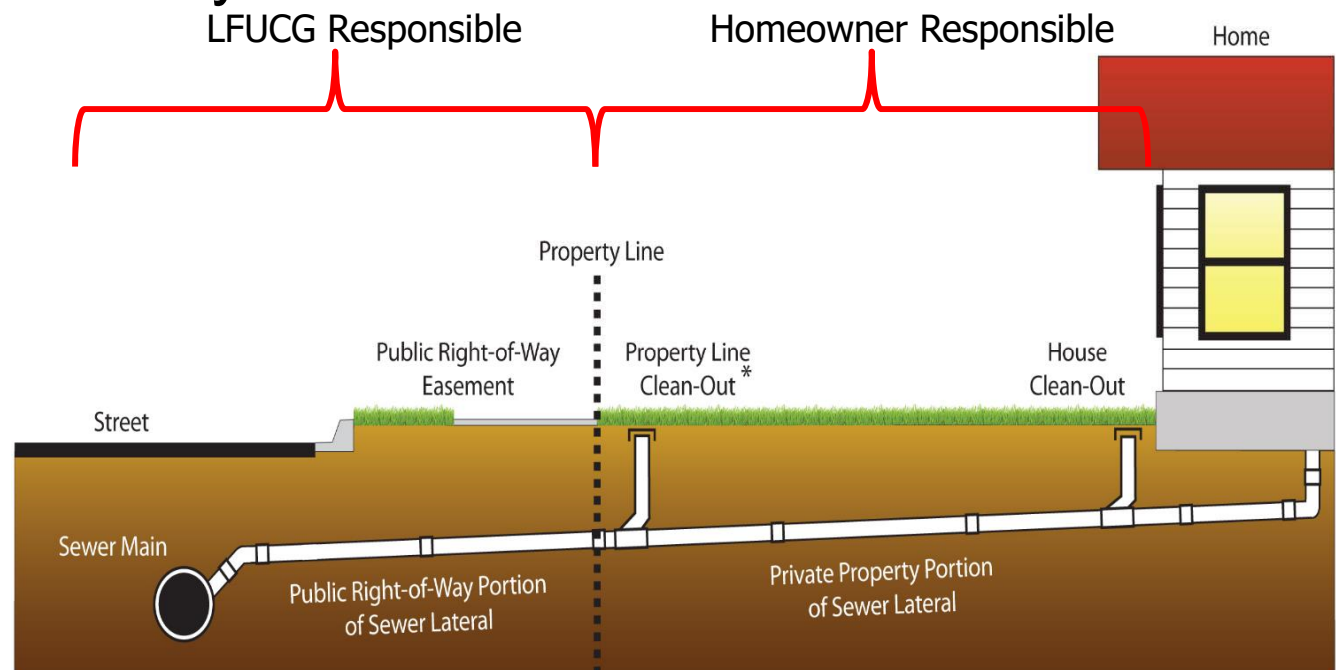
- A. Review and update smoke testing, LexCall, other targeting databases
- B. Identify priority areas for possible project sites
- C. Implement demonstration projects in high priority areas
- D. Develop incentive program to cost-share lateral line replacements
- E. Ordinance requiring verification of lateral integrity (*e.g.*, time of sale)

Top Option —————→

Why Recommend This SEP?

Addresses Gap Not Covered by Consent Decree

- Capital Projects to Improve City-Owned Infrastructure
- Improvements to Management, Operation, and Maintenance of City-Owned Sewers



Model the Approach Used in Previous Program

- [illegible]

Next Steps

- Finalize SEP requirements document based on EQPW Committee's recommendations / endorsement.
- Confirm State's endorsement of SEP requirements document.
- Blue Sheet for Mayor's signature.
- Conduct neighborhood meeting and commence SEP implementation.
- Finalize data and lessons learned into a SEP Completion Report for state approval / future MS4 program development.



Questions?