

Gorton
Blues
Farmer
Stinnett
Martin
Henson
Lane

A G E N D A

ENVIRONMENTAL QUALITY COMMITTEE

January 18, 2011
3:00 P.M.

1. Election of Committee Chair
2. Selection of Vice Chair
3. Capacity Assessment – Blues (1-23)
4. Items Referred to Committee (24)

“Environmental Quality Committee, to which shall be referred matters relating to the Department of Environmental Quality and its divisions, and any related partner agencies.”

-Council Rules & Procedures, Section 2.102(1)

Effective January 1, 2011. Adopted by Urban County Council October 14, 2010

Committee Schedule. 3:00 PM except noted

January 18

February 15 (1:00 PM)

March 8

May 10

September 20

November 29

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SSSA Final Reports and Remedial Measures Plans

Presentation to

Lexington-Fayette Urban
County Government
Environmental Quality
Committee

January 18, 2011

HAZEN AND SAWYER
Environmental Engineers & Scientists

CDM



Stantec

ehi
consultants

Acronyms



CAP	Capacity Assurance Program
CMOM	Capacity, Management, Operations and Maintenance
I&I (or I/I)	Infiltration and Inflow
RMP	Remedial Measures Plan
SEP	Supplemental Environmental Project
SSA	Sewer System Assessment
SSSA	Sanitary Sewer System Assessment
SSO	Sanitary Sewer Overflow
WWTP	Wastewater Treatment Plant

Consent Decree Background

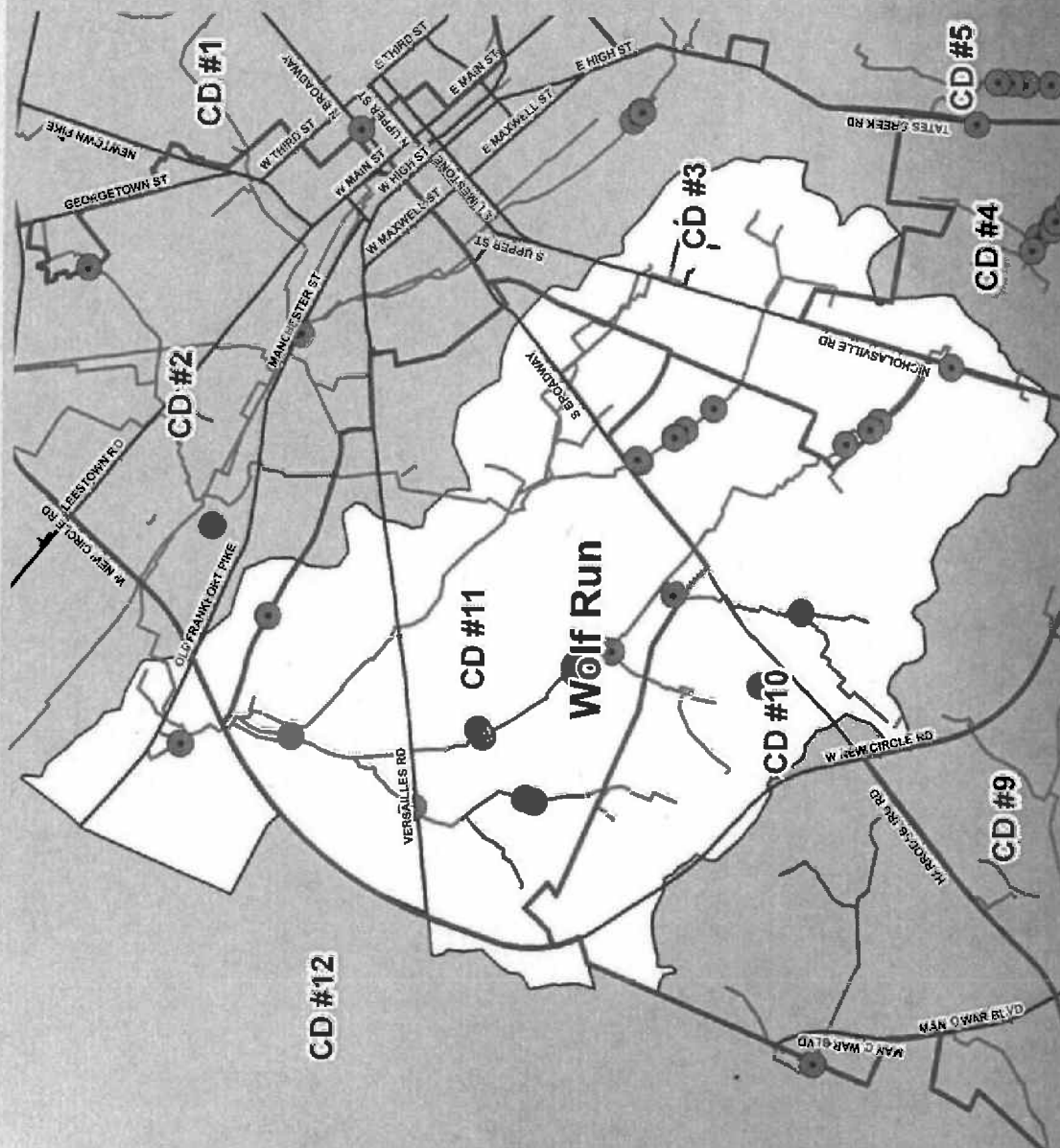


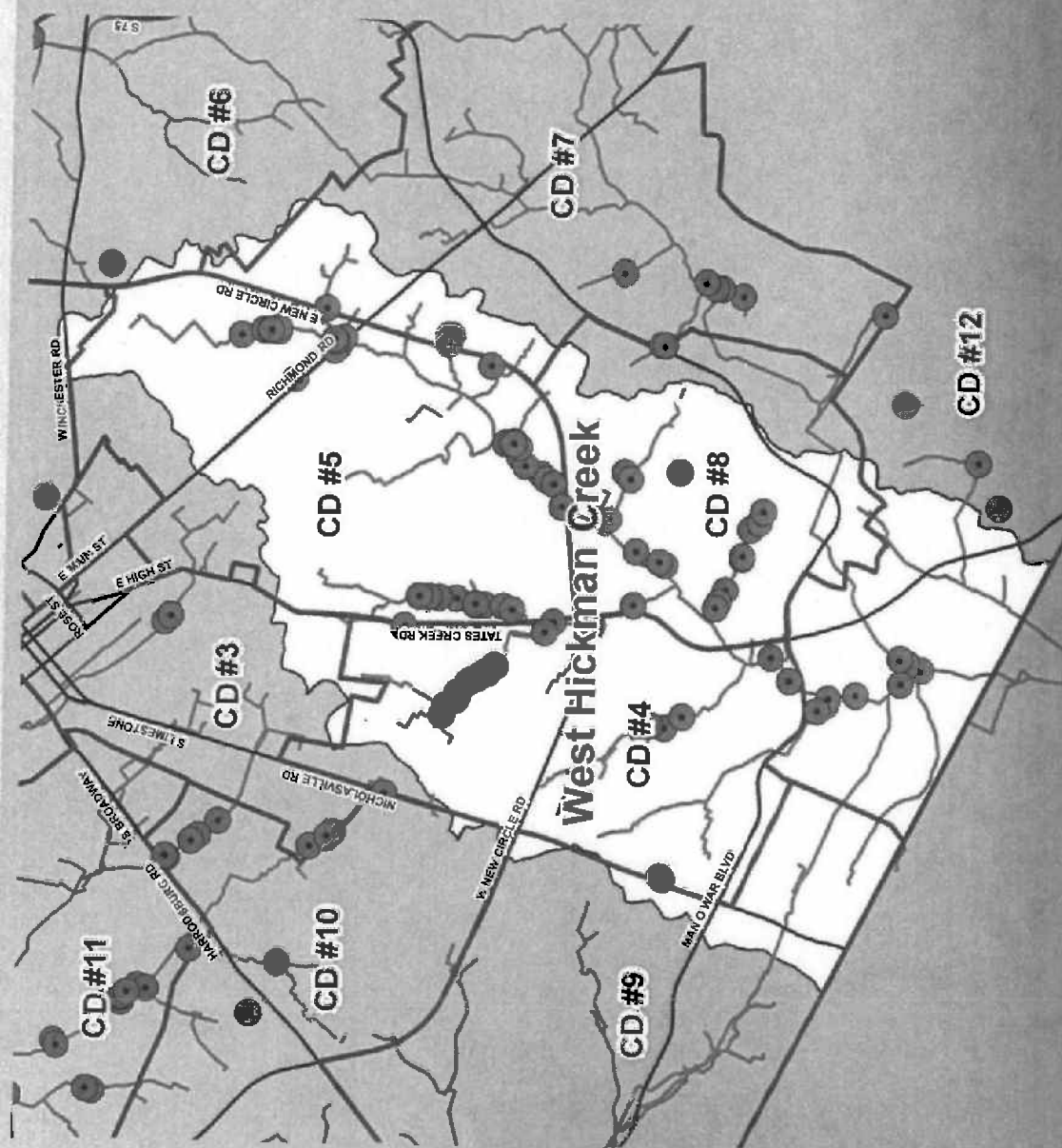
- USEPA enforcement action due to violations of Clean Water Act
- Typical of similar-sized communities
- Lodging date: March 2008
- Entry date: January 2011
- Lodging and Entry dates determine specific deadlines



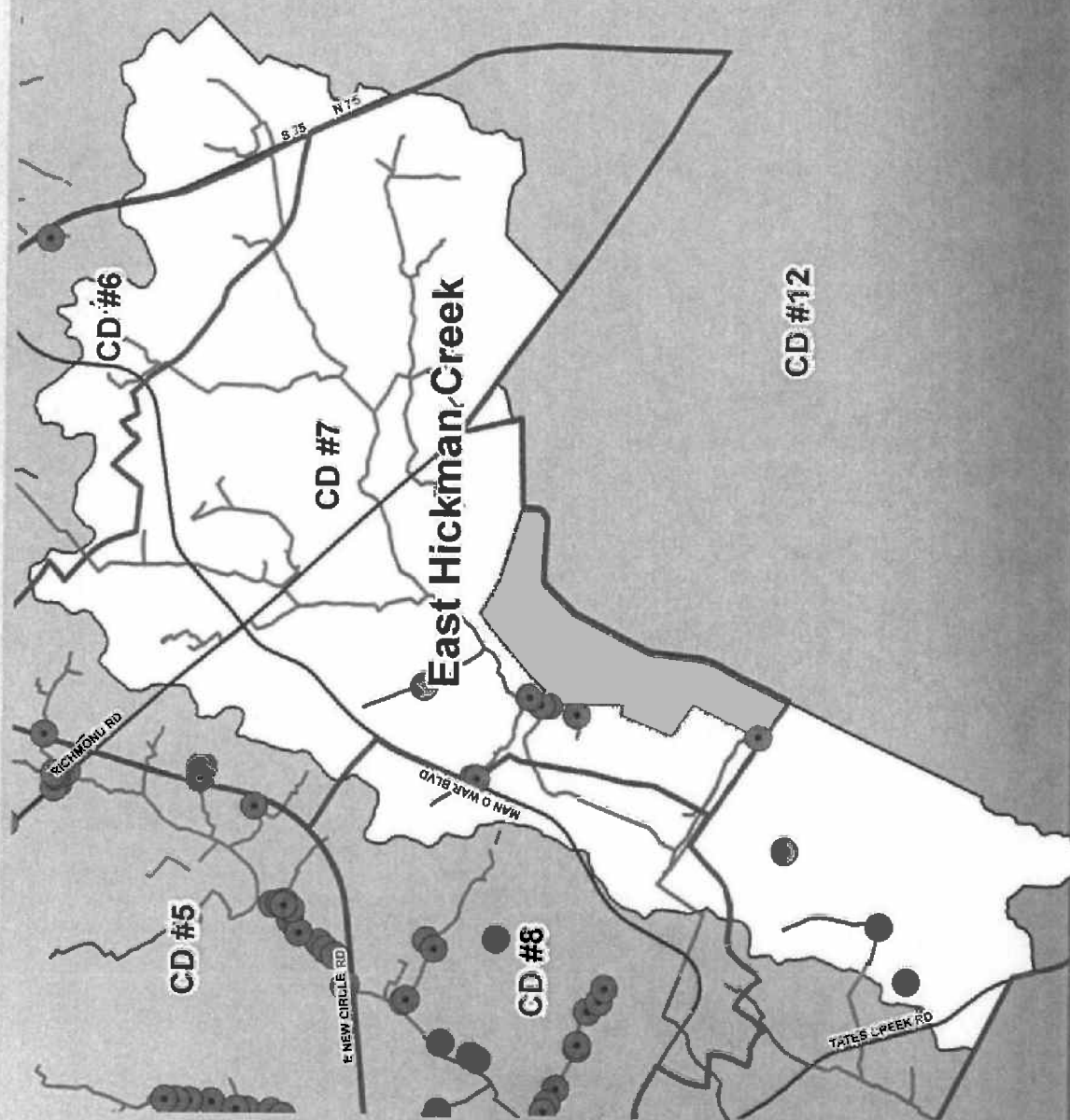
Primary wastewater goal: eliminate recurring SSOs caused by wet-weather infiltration and inflow

Recurring Sanitary Sewer Overflows – Wolf Run





Recurring Sanitary Sewer Overflows – East Hickman



Consent Decree Requirements (Sanitary Sewers)



- Near-term capital projects (i.e. North Elkhorn and South Elkhorn Pump Stations)
- Sanitary Sewer Assessments (SSAs)
- Pump Station Adequacy Evaluation
- Capacity Assessment and Hydraulic Model
- Remedial Measures Plans (RMPs)
- CMOM Self-Assessment
- Commonwealth SEP – Blue Sky Parkway

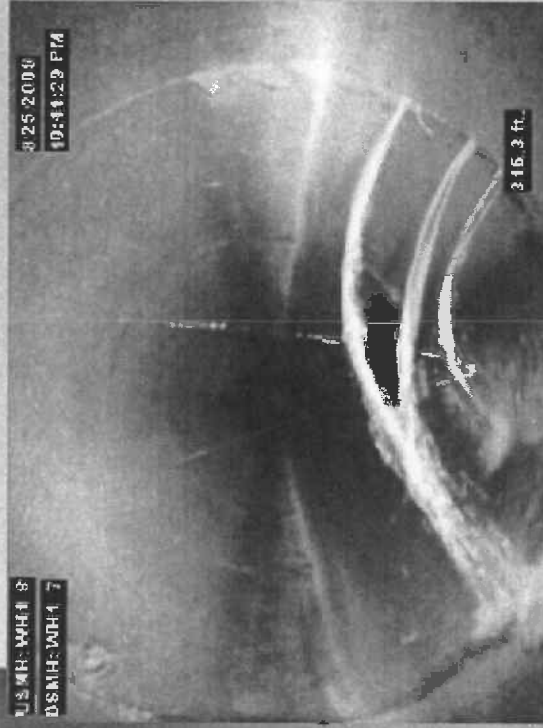
CD Compliance Progress



- Near-term capital projects nearly complete
- Group 1 SSA field work complete
- Groups 2-3 SSA field work under way
- Pump Station Adequacy Report complete
- Capacity Assessment nearly complete
- Remedial Measures Plans in progress
- CMOM Self-Assessment ongoing (permanent)
- Blue Sky Parkway – pending

Original CD schedule has been followed

Typical Sanitary Sewer Defects



*Active I/I in 54-inch West
Hickman trunk sewer*



Leaking Manhole



*Smoke testing
indicates private
lateral defects*

Stream Flow Entering Manhole



Near-Term CD Schedule

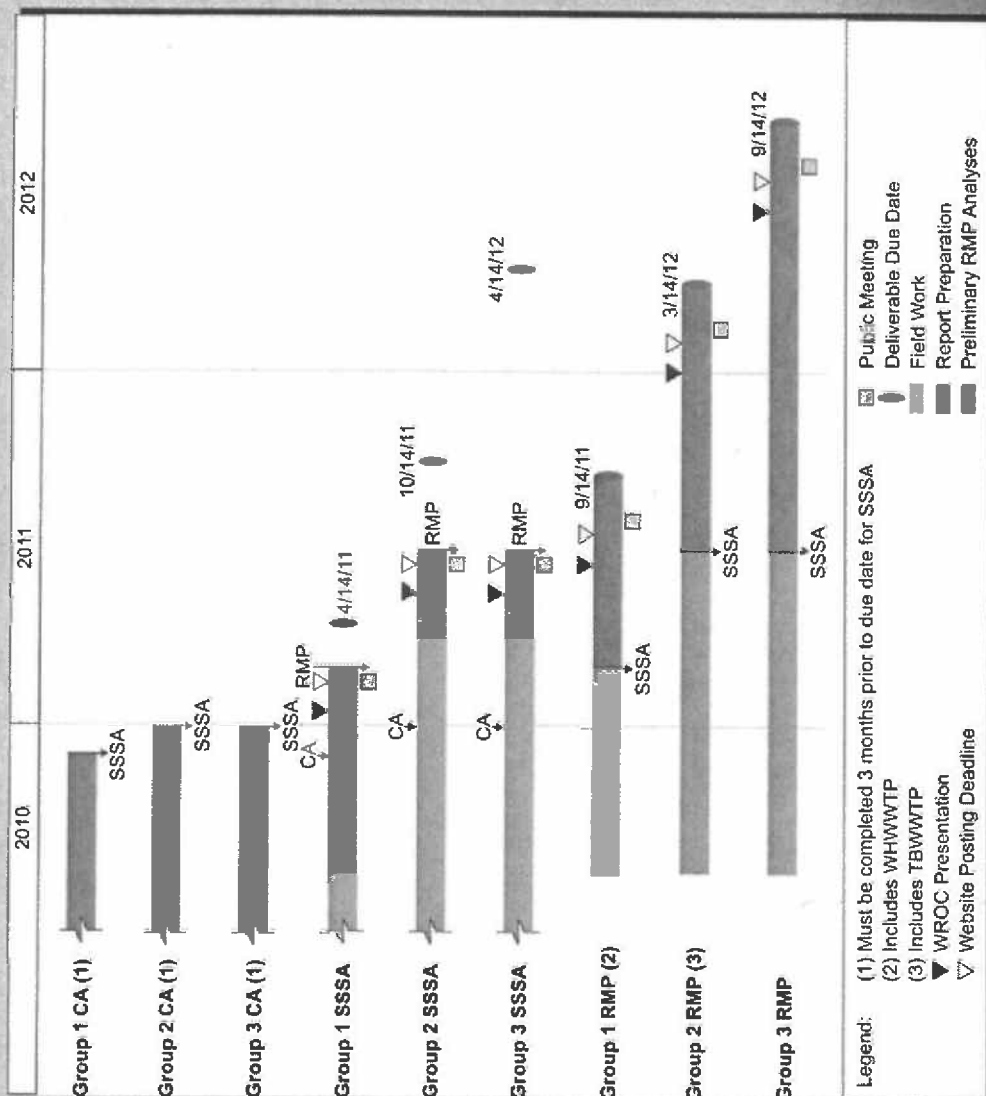


- Capacity Assessment – groups 2/3
- SSAs – groups 2/3 field work and reports
- Remedial Measures Plan – Group 1
- Capacity Assurance Program (CAP)
- Continue Capacity Management, Operations, and Maintenance (CMOM) programs



RMP Project Schedule

First deadline:
Group 1 SSSA
Report due
March 2011

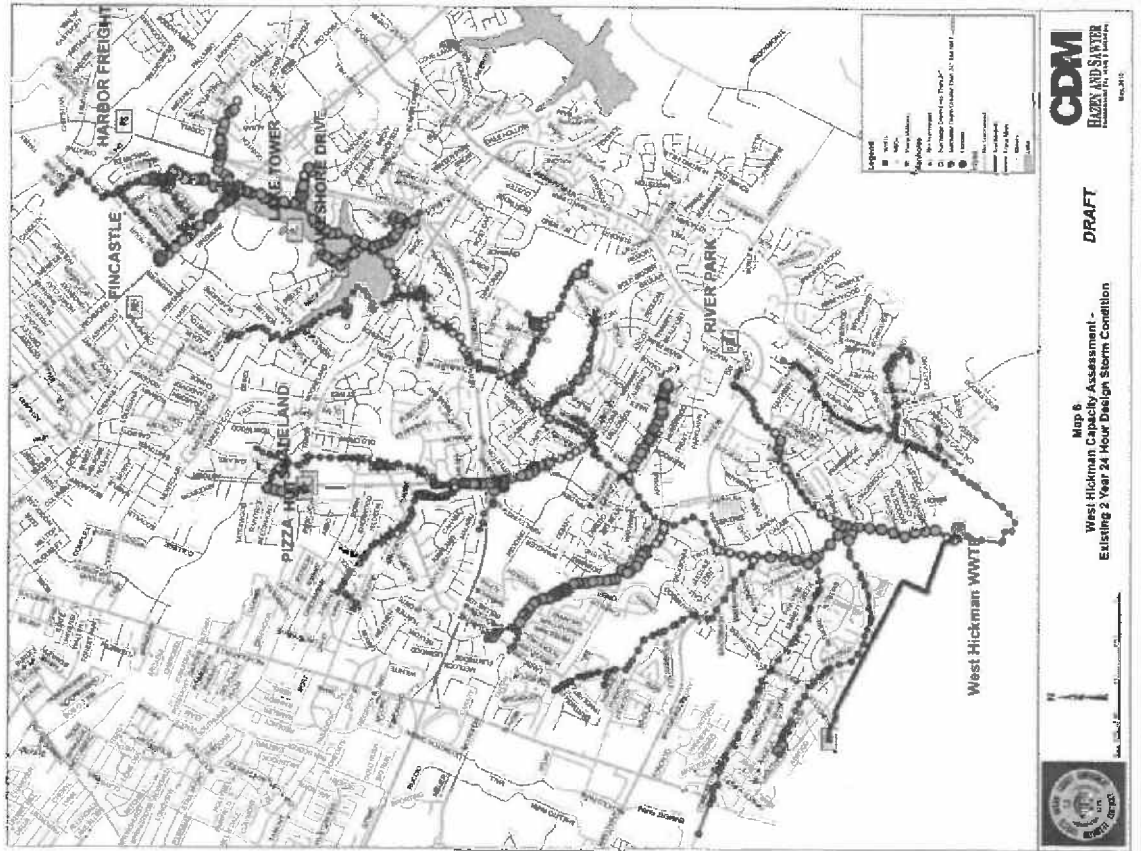


SSSA Report Components



- PS Adequacy – 20 pump stations evaluated with improvements recommended
- SSA Group 1 – Condition deficiencies throughout system
- Capacity Assessment – Capacity deficiencies in major systems
- Improvements made that reduced Infiltration and Inflow (I&I)

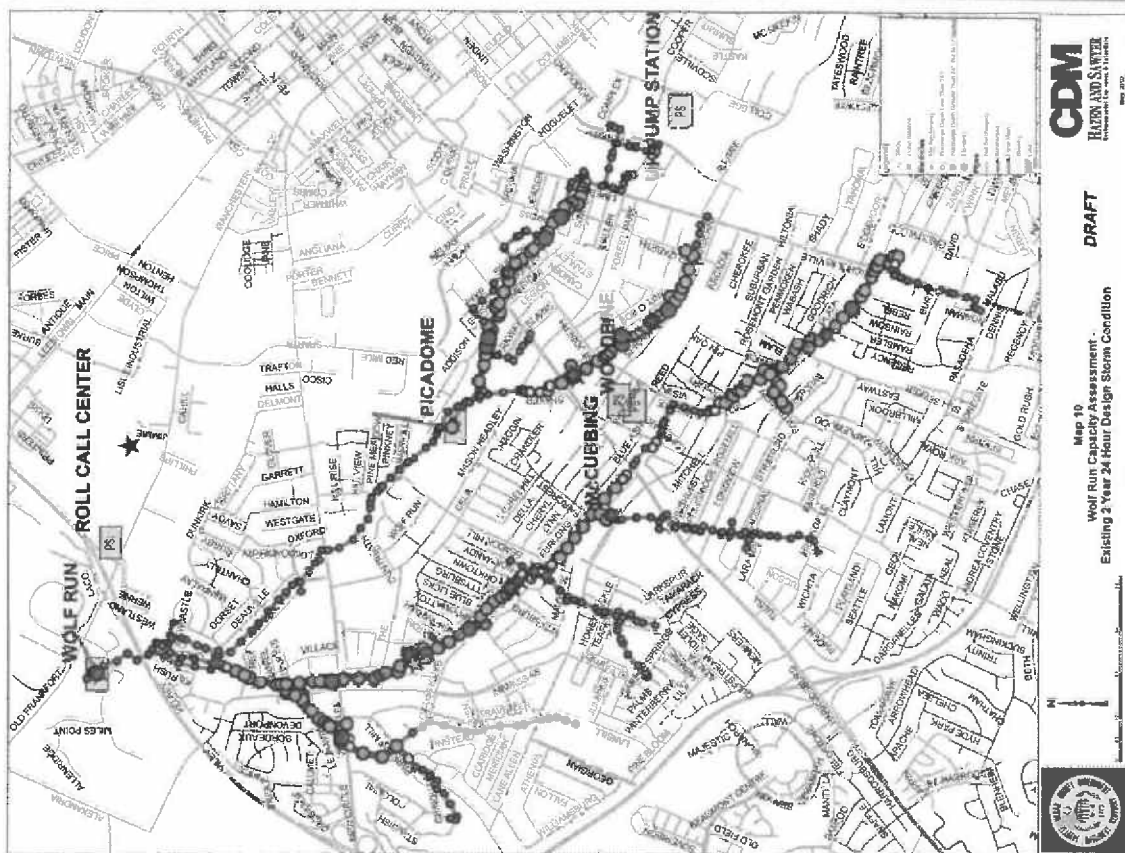
Existing West Hickman Capacity Issues







Existing Wolf Run Capacity Issues





RMP Components

- Master Plan of improvements required to eliminate Recurring SSOs
 - Capital improvements – transport, storage, treatment
 - System rehabilitation to reduce I&I
 - Operational improvements
 - Prioritization and implementation plan
 - Cost estimates and phasing
 - Consideration of future development
 - Consideration of neighborhood impacts
- Stakeholder involvement
 - LFUCG
 - Commerce Lexington, Homebuilders Assoc., media, etc.
 - Other civic and neighborhood associations
- Web site development and public meetings

Critical RMP Issues - Level of Service



- Weigh the cost of SSO elimination vs. penalties and EPA acceptance
- Consider precedents from other Region 4 communities (i.e. Louisville, Knoxville)
- Level of Service relates to selection of a specific design storm for which no SSOs would be predicted to occur
- Design storm selection has a major impact on the overall program cost

Critical RMP Issues - Accurate Initial Cost Estimates



- RMP development is iterative process
- Treatment plant discharge limits may change in new permits, increasing costs for expansions/upgrades
- Community acceptance of solutions not known
- RMP will include planning-level estimates, but final costs not known until implementation

Critical RMP Issues - Public Involvement / Input



- New administration and Council
- Community stakeholders
- Media
- Web site development
- Potential work on private property (sump pump and downspout disconnects)
- Need direction for RMP program over next few months

Web Site Development



Lexington-Fayette Urban County Government Remedial Measures Program



Links

Contact

Find & Fix

Projects

Public Involvement

Overview



Enter your text here

Search

Informational Links

Program Description

Previous Public Meetings

Upcoming Public Meetings

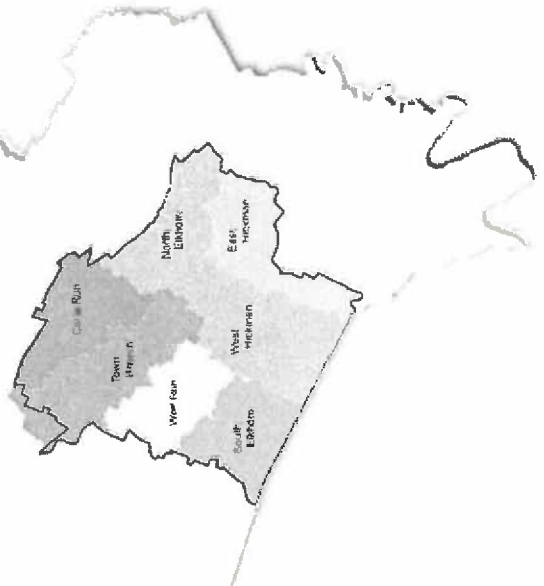
What's Happening in Your Area?

Provide Your Comments

Contact Us

What's Happening in Your Area?

Click on your watershed below to see projects in your area





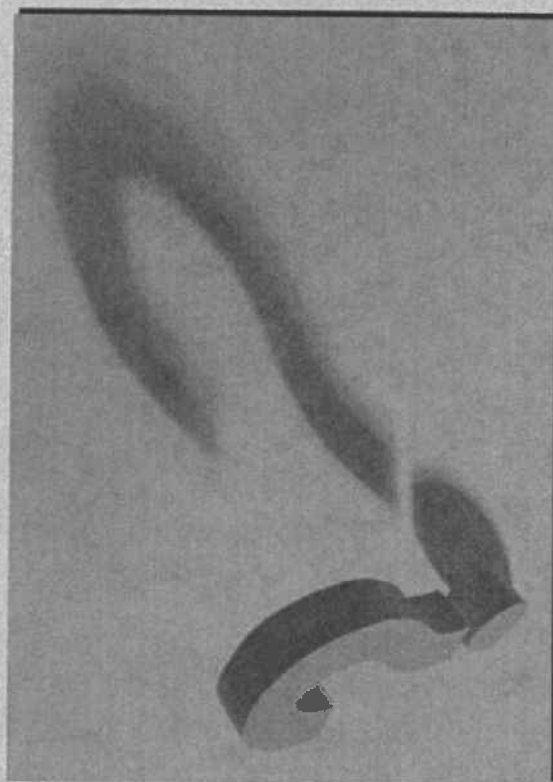
Summary

- DWQ is on track with Consent Decree schedule
- Decisions needed from LFUCG:
 - Public involvement direction
 - Level of protection (Level of Service)

Need decisions by April 2011

- Other issues that will require attention:
 - LFUCG operational changes (procurement, O&M, etc.)
 - Community tolerance of future construction
 - Willingness to enforce sump pump and downspout disconnects

Questions?



EXISTING COMMITTEE ITEMS IN NEW COMMITTEE STRUCTURE

Environmental Quality Committee

Item	Old Committee	New Committee	CM Referred
Private Solid Waste Providers	Services	Environmental Quality	Gorton
Capacity Analysis	Water Quality	Environmental Quality	Blues