Wet Weather Team Project Meeting Materials

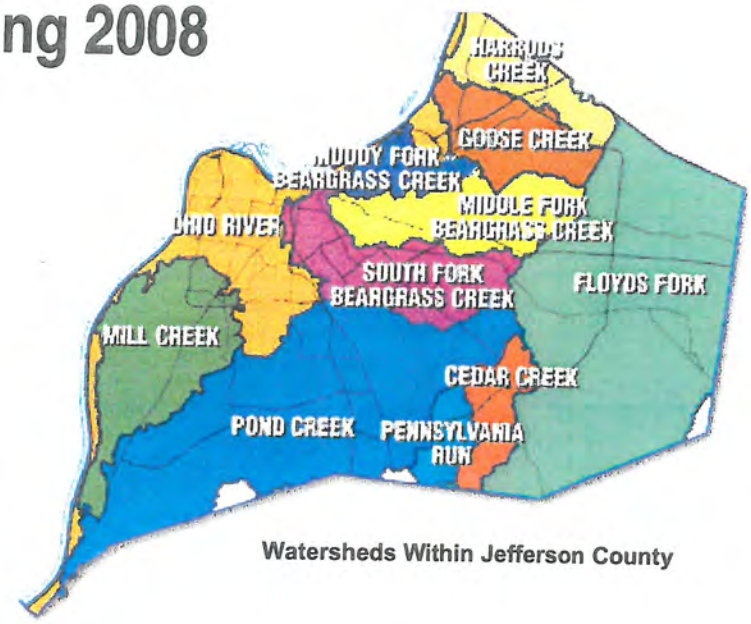
Summer 2007–Spring 2008

01.05.0226.11

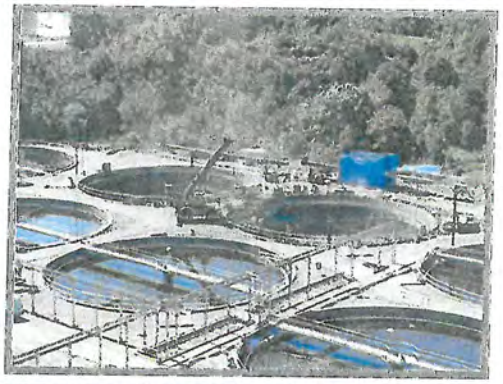
WWT Stakeholders Meeting # 26 6/20/2011

MSD

Louisville and Jefferson County
Metropolitan Sewer District



Watersheds Within Jefferson County



Agenda

No Agenda

No Meeting Summary

Handouts

THE CHALLENGE

During development of the Integrated Overflow Abatement Plan (IOAP) MSD's Wet Weather Team (which includes the Stakeholder Group) developed and implemented a multi-faceted program for soliciting public input that was highly effective and praised by regulators for its comprehensive approach. Now that the IOAP has moved into the engineering, design and construction stages, a continued commitment to obtaining public input is necessary to ensure successful implementation. Recent discussions about project siting have indicated a need for a more rigorous and better documented process for obtaining project-specific public input. The process must actively solicit public input at various project stages and clearly document both the public's comments and MSD's responses. MSD's responsibilities are to all customers, not just the ones who provide comment, so addressing and documenting responses to comments will help assure customers and regulators that MSD is listening to public comment, and acting in compliance with the letter and the intent of the Amended Consent Decree.

WHAT THE AMENDED CONSENT DECREE SAYS ABOUT THE WET WEATHER TEAM

"The Director has assembled a Wet Weather Team that includes all entities that have a stake in the program outcome, and is sufficiently multidisciplinary to address the myriad of engineering, economic, environmental, and institutional issues that will be raised during the implementation of the remedial measures under this Amended Consent Decree. The team will prepare a plan for funding the program and will develop a program for public information, education, and involvement.

The Wet Weather Team assembled by the Director contains MSD personnel such as wastewater treatment plant operators and engineering personnel, local political officials, and the general public, including rate payers and environmental interests. Private consulting resources are also included. The Wet Weather Team may consult as appropriate with the Cabinet and EPA officials on the progress of MSD's implementation of the requirements of this Amended Consent Decree."

While the Amended Consent Decree is not specific about the roles or durations of involvement by the various parties in the Wet Weather Team, EPA has taken the position that public involvement in on-going implementation decision-making is essential, and if the Stakeholder Group is no longer an active part of the Wet Weather Team decision-making process, then an equivalent alternative approach to getting public involvement in the decision-making process must be developed.

HOW MIGHT WE ADDRESS THIS ON-GOING EXPECTATION?

The current IOAP project list includes over 100 projects to be implemented between now and the end of 2024, with new green infrastructure projects being added as new partners and opportunities are identified. With over 50 projects currently active, it is necessary to develop a process that allows the public to provide meaningful input in a format that is makes good use of MSD staff and MSD customer's time. Based on MSD's past experience, it is not productive to try to hold project-specific meetings in each neighborhood at each stage of every project's implementation. Until construction starts, most projects are not controversial and most project outreach meetings get little or no attendance. Pre-construction "pardon our dust" meetings will continue to be held for all projects with the potential for neighborhood disruption, as these have proven beneficial to our customers and our project teams.

To obtain meaningful project-specific public input and give customers the opportunity to comment on any active or planned project of interest to them, MSD is considering periodic

"open-house" meetings. More details about how these meetings could be structured are attached. If the open house response indicates the need for additional dialog with the community, project specific meetings can be held at times and locations convenient for all parties.

We are soliciting Stakeholder Group input on this concept at the June 20 meeting.

QUESTIONS WE HAVE FOR YOU - TO BE DISCUSSED JUNE 20

- Does this open house concept make sense? If not, how can we better obtain project specific input without imposing an unreasonable burden on our customers or our staff?
- If we do open houses, what frequency should they be held?
- How can we best publicize meetings (open house or other) to make sure concerned customers know that they have an opportunity for input?
- How can we provide advance information to improve the public's understanding before the comments are provided?
- How should we document comments received and responses to those comments?
- How should we handle "off-the-wall" comments or non-specific criticism not relevant to the project issues at hand?
- What role, if any, should the Stakeholder Group play in these or any other ongoing public outreach efforts?

IOAP Public Involvement During Project Implementation

(proposed for 1-year trial period, then evaluate effectiveness and revise if appropriate)

Periodic "open house" meetings, initially scheduled quarterly, with frequency adjusted based on attendance, numbers of projects moving from one stage to another, or as experience indicates. Meetings could be publicized via a variety of methods:

- General notice on MSD's web page.
- Specific email invitation to Stakeholder Group members, Metro Council members, and KDOW, requesting they post or forward to other interested parties.
- Option on MSD's web page for general public to sign up for meeting invitations similar to wet weather alerts. Initial email blast including neighborhood groups etc. inviting to sign up, also discussed in bill stuffer and other MSD electronic and hard copy publications.
- Link to most current Quarterly Report will be included in meeting announcements and invitations.

Open House format, 3:00 pm – 7:00 pm, at MSD Main Office Building, first floor common areas and conference rooms

Information tables set up for the following topics:

- IOAP general (to look for future project schedules)
- Projects in advanced planning and development (scoping and alternative review)
- Projects in preliminary design (selected approach concept review)
- Projects in design (configuration of approach being implemented)
- Projects in construction (unanticipated construction impacts on neighborhoods)
- Amended Consent Decree programs (NMC, SORP, CMOM)
- Drainage and flood protection
- Customer Relations – general MSD information

Minimal handout info prepared in advance. Project updates, photos, maps etc. downloaded from SharePoint – will allow relatively few staff to cover wide range of issues

All questions and comments documented on standard form, input into Hansen

- Response in 7 days if commenter gives contact info (might just be to give a schedule for more complete response)
- Comments and responses posted on Project WIN external web page
- Comments responded to once will not be revisited in subsequent meetings

Potential high-impact or controversial projects may still have project-specific public outreach meetings during planning and development, preliminary engineering, and/or design (e.g. basin at I64 & Grinstead, Portland Wharf and Shawnee Park basins).

SYNTHESIS OF STAKEHOLDER GROUP COMMENTS ON PUBLIC INVOLVMENT APPROACH
June 2011

FORUM AND FORMAT FOR RECEIVING COMMENTS

- Periodic open house meetings a good idea, but holding all of them downtown will discourage participation by some.
- Since there is no ideal location that works for everyone, video-taping the meetings and making them accessible on Metro TV and YouTube would allow everyone to see the project updates and questions posed by the audience in a general overview session.
- The project-specific detailed questions that come out of one-on-one open house discussions would not be video-taped, but the Q&A would be documented as noted in the draft approach distributed in advance.
- People who view the sessions on TV or online would be given contact information to allow them to provide comments or questions through email, hard copy mail, or calls to MSD Customer Relations.
- Each open house should start out with a summary of project status covering all the active and upcoming IOAP projects.
- Each open house should also focus on a few high-profile projects making sure we address good news as well as challenges. Include community partners in presentations about successful green projects – get credibility from third-party endorsements.
- MSD should solicit ideas for improving the process at each open house, as a standing agenda item.

RESPONDING TO COMMENTS

- Proposed approach to comment response was good:
    - direct mail or email response to the questioner if they provided contact info
    - posting Q&A following each meeting
    - Q&A track through Customer Relations Hansen system
    - It was suggested MSD should consider developing FAQs to cut down on repeat questions. This could include an interactive map with project information, etc.
    - Make sure to answer in a way the general public can understand.
- If MSD's response to a question or comment does not satisfy the person, they have the option to take the issue to the MSD Board through the revised policy governing speaking during Board meetings.
- Follow-up is key. Keep track of promises, do what you say you will do, and publicize that you acted on public suggestions.

SYNTHESIS OF STAKEHOLDER GROUP COMMENTS ON PUBLIC INVOLVMENT APPROACH
June 2011

PUBLICIZING MEETINGS

- Direct email sign up list is good approach – do major publicity push to get people and organizations (e.g. neighborhood associations, special interest groups etc.) signed up
- Post invitations and agendas for open house meetings on MSD's web page
- Include on email notice lists the appropriate parties at Metro Government, KDOW etc. so they can include in their calendar notices.
- Include open house meeting notices with all MSD in-house and external publications, whether electronic or hard copy (e.g. *Cross Currents*)
- Do direct mail or bill stuffer reminder about the meetings and email sign-up procedures.

NEXT STEPS

- Review with EPA/KDEP
- Send out revised approach to Stakeholders for comment
- Finalize approach and present to MSD Board
- Publish final approach on MSD web page and begin publicizing first open house
- Do first open house in September 2011

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PROJECT WIN
Waterway Improvements Now

Wet Weather Team Meeting
Public Outreach Update
June 20, 2011

CLEAN, GREEN, GROWING COMMUNITY

Agenda

- Our Challenge
- The Wet Weather Team
- Getting Public Input
- An Option - Open House Meetings
- Questions for Discussion

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Our Challenge

Public Input - during IOAP development

- Wet Weather Team
- Stakeholder Group Meetings
- Public Outreach Meetings
- Public Hearing

Major outreach investment paid dividends in IOAP outcome

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Our Challenge

Public Input - during IOAP implementation

- Continued commitment necessary
- Recent concerns with project site selection
- Develop a process that solicits public input
  - Various project stages
  - Clearly document input and response

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The Wet Weather Team

Per the Amended Consent Decree

- Includes all entities with stake in the program…
- Address issues that will be raised during implementation…
- Prepare a plan for funding…
- Develop a program for public information, education and involvement…

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The Wet Weather Team

Per EPA Region 4

- Public involvement in on-going decision making is essential
- Two Options
  - Stakeholder Group becomes active part of decision making process on public issues through 2024
  - Develop alternate approach

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Getting Public Input

- Current Project Outreach for Input
  - Planning/design, case by case
  - Preconstruction "Pardon Our Dust", most projects
- Project Load through 2024
  - 100+ IOAP Projects
  - Other sanitary, drainage, flood protection, green projects
- Seeking Realistic Process

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"Open House" Meetings

- Schedule
  - Quarterly, initially
  - Adjust frequency based on utilization/effectiveness
- Open House Format
  - 3-7 pm, Main Office Conference Area
  - "One Stop Shop" for IOAP project issues in all stages of active implementation
  - Address other MSD issues too

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"Open House" Meetings

Publicizing Meetings

- MSD webpage announcement
- Email Invitation with forwarding request
  - Stakeholder Group Members
  - Metro Council Members
  - Kentucky DEP/DOW
- Create option for public to "sign up" on webpage to receive email announcements

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"Open House" Meetings

Advance Materials Preparation

- Provide link to Project WIN Quarterly Reports via the email announcement to view active project list
- Have available plans and photos of the active projects
- Have access to SharePoint computer system to view additional info if needed

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"Open House" Meetings

Meeting Documentation

- In person comments entered into Hansen
- Direct response to individual within 7 days
- Comments/responses posted to the Project WIN webpage
- Repeat comments will not be addressed

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Questions for Discussion

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Sanitary Sewer Evaluation Studies

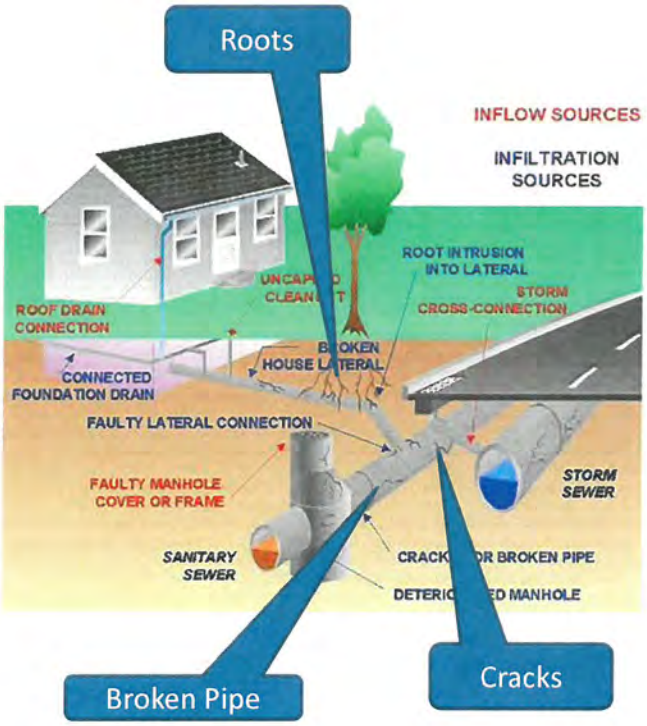
Fixing the Leaks

Groundwater entering our sewer pipes can increase the flows up to 3 to 20x the normal flow.

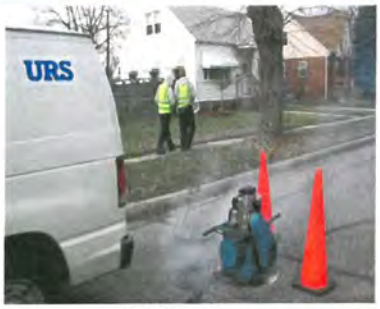
Pipe Capacity

Normal Flow in a Pipe

Wet Weather Conditions



Sanitary Sewer Evaluation Testing



Smoke Testing

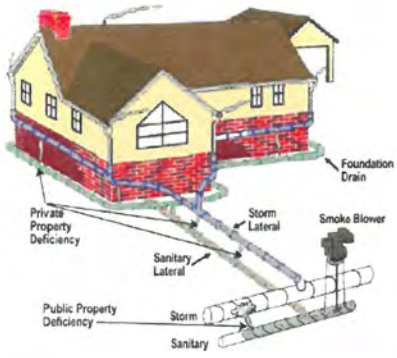
Helps identify defects and improper connections in sewers. An *odorless* and *nontoxic* smoke is blown into the sewer. Smoke leaks out where there is a defect or an improper connection.

Yard signs and weekly notices will be issued before smoke testing is conducted.

Closed Circuit Television Inspections (CCTV)

A technology used to inspect sewer pipes. The lines are lightly cleaned and a robotic device with a television camera is run through to locate and identify defects in the pipes.

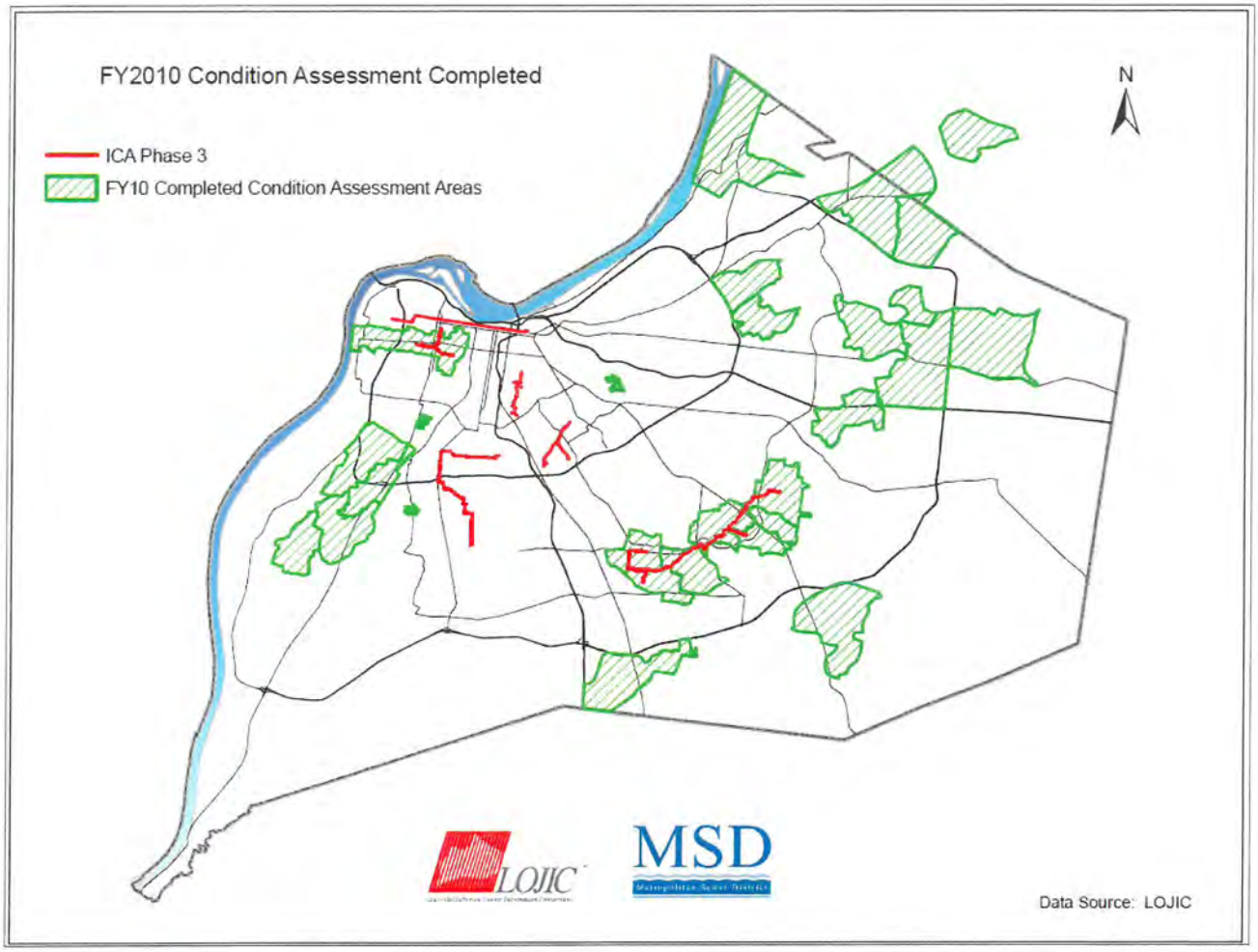
How Smoke Testing Works



Private Property Inspections

These inspections are conducted in order to identify drains, downspouts, and sum pumps at each home.

These inspections may require entry into your home, however you will be contacted in advance to schedule a time for these inspections.



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SSES FY10-11 Summary

SSES Projects Completed: ($5.4 M)

Camp Taylor
Cherokee Park
Parkview Estates
Prospect (N & S Hunting Creek WQTC)
Starview, Berrytown and Lake Forest WQTC
Lea Ann Way PS
Lantana PS
Riding Ridge PS
Gunpowder PS
Fox Harbor PS
Kavanaugh Rd PS
Meadow Stream PS
Floydsburgh Rd PS
Eden Care PS
Edsel PS
East Rockford PS
Sonne PS
Hazelwood PS
Little Cedar Creek Interceptor

SSES Totals:

CCTV 1,170,000 LF (222 Miles)
Manhole 6,206 Ea
PPI 1,773 Ea
Smoke 1,402,947 LF (266 Miles)
Wet Weather 26 Ea

ESTIMATED REHAB COSTS:

Pipe - $20.7 M
Manholes - $1.3 M
Sump Pumps/Down Spouts - $1.8
SCAP Credits – 7.8 MGD

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Rehab Projects

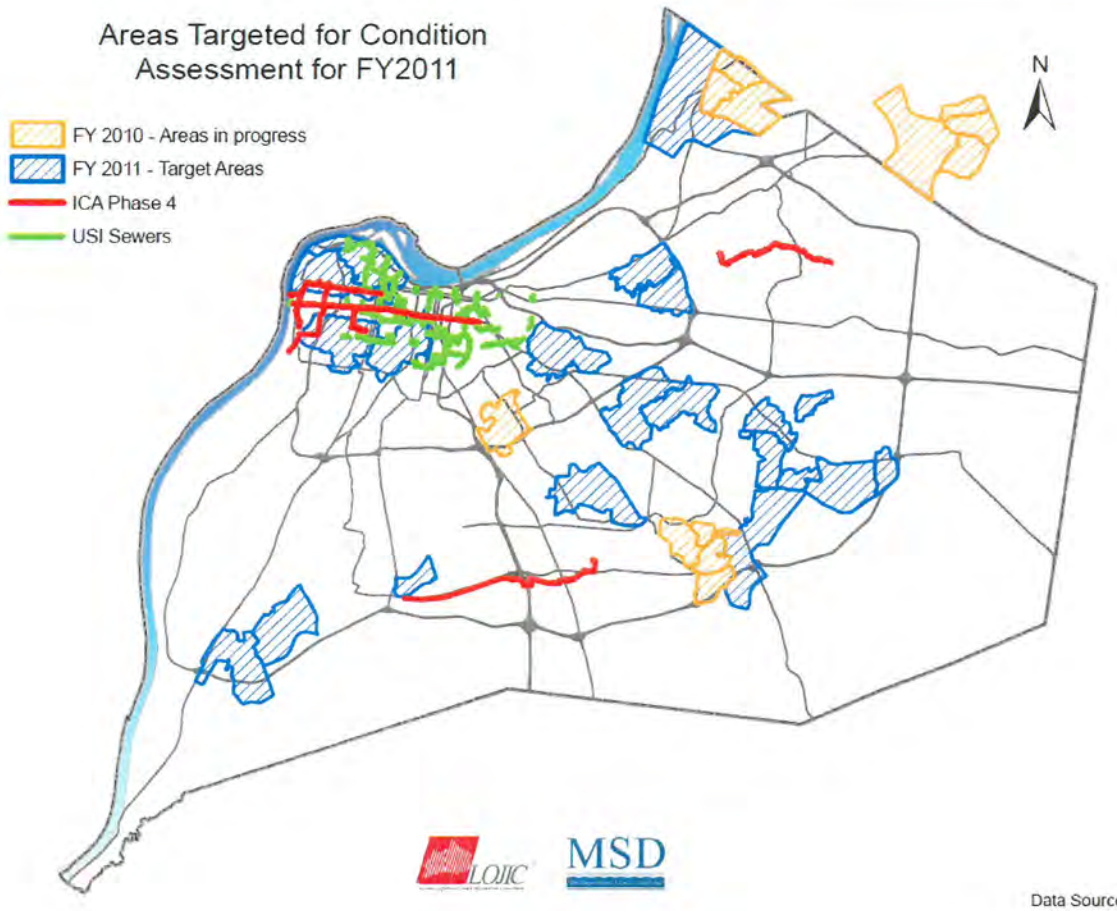
(Next 6 - 12 Months)

Design:

Hurstbourne (Bidding)
Beargrass Int Phase 2
Camp Taylor
Lea Ann Way
Lantana PS
Eden Care PS
Derington PS
Middletown Int
Upper Middle Fork Int

In Construction:

Beargrass Interceptor (complete)
Floydsburg PS (complete)
Sonne
Hazelwood
Parkview Estates Rehab
Parkview Estates Replace
Edsel



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SSES FY11-12 Summary

SSES Projects Planned ($ 3.4 M):

Prospect Phase 2
Cedar Creek Phase 2
Shively
Pond Creek
Silver Heights WQTC
Yorktown WQTC
Chenoweth Hills WQTC
Chenoweth Run PS
Caven PS

SSES Totals:

CCTV 1,339,140 LF (230 Miles)
Manhole 5,259 Ea
PPI 1,110 Ea
Smoke 1,339,140 LF (230 Miles)
Wet Weather 36 Ea

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The Root of the Issue

Where? Hazelwood Ave
Pipe Size? 8" pipe
Defect? Major root intrusion

Root issues pack a double punch. When there are roots inside of the sewer pipe it can cause back up or blockage of flow issues. This problem reduces the capacity of the sewer pipe and the ability take the wastewater flow away from houses. Another concern is where the roots have gained access to the pipe ground water can also leak in also reducing the capacity of the pipe.

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Where? Edsel Lane
Pipe Size? 8" pipe
Defect? Pipe Failure

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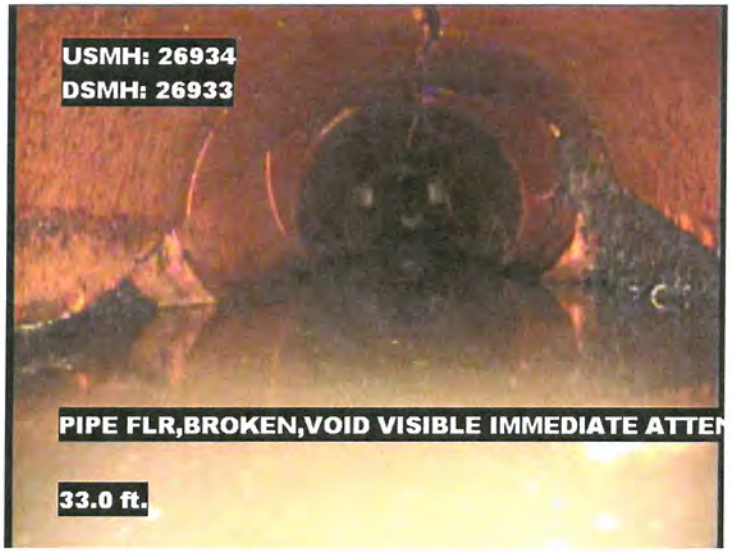
When the Bottom Falls Out

Where? Hazelwood Ave
Pipe Size? 8" pipe
Defect? Pipe Failure

The I&I program is targeted at reducing groundwater from getting into the sewer system. When there is a pipe failure the pipe walls have collapsed and the barrier between ground water coming in and sewage going out is breached. This situation is not common but requires attention promptly.



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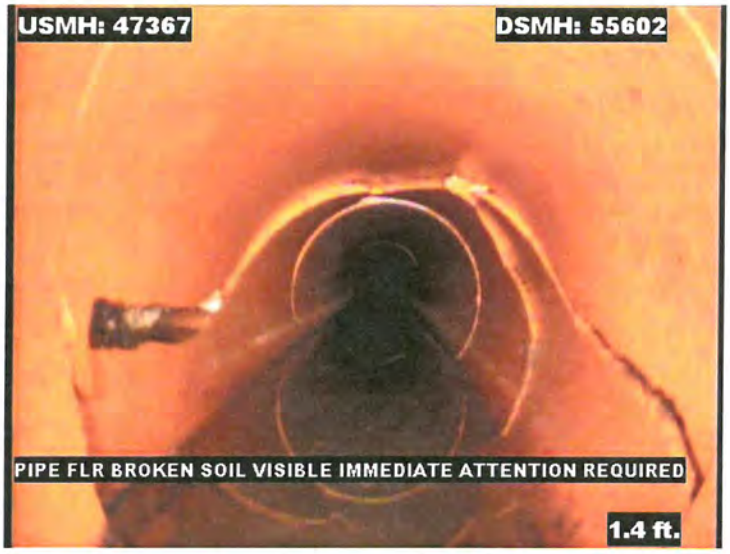

BROKEN PIPES

Where? Edsel Lane
Pipe Size? 8" pipe
Defect? Pipe Failure

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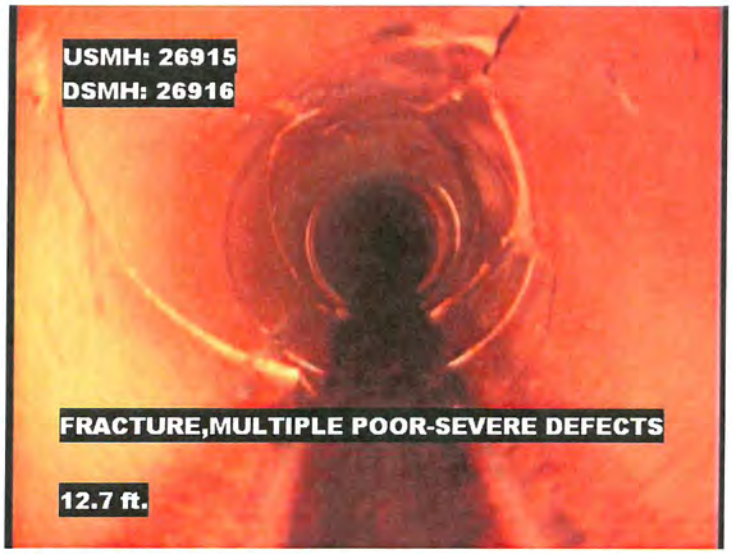

Where? Edsel Lane
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Where? Edsel Lane
Pipe Size? 8" pipe
Defect? Pipe Failure

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INFLOW AND INFILTRATION

Where? Edsel Lane
Pipe Size? 8" pipe
Defect? Pipe Failure

Groundwater enters sewer pipes through cracks, holes and other small openings in pipes. The ground water takes up space in the pipe. This groundwater is then treated at our water quality treatment centers. The more groundwater we can keep out of the sewer system the better.

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Where? Edsel Lane
Pipe Size? 8" pipe
Defect? Pipe Failure

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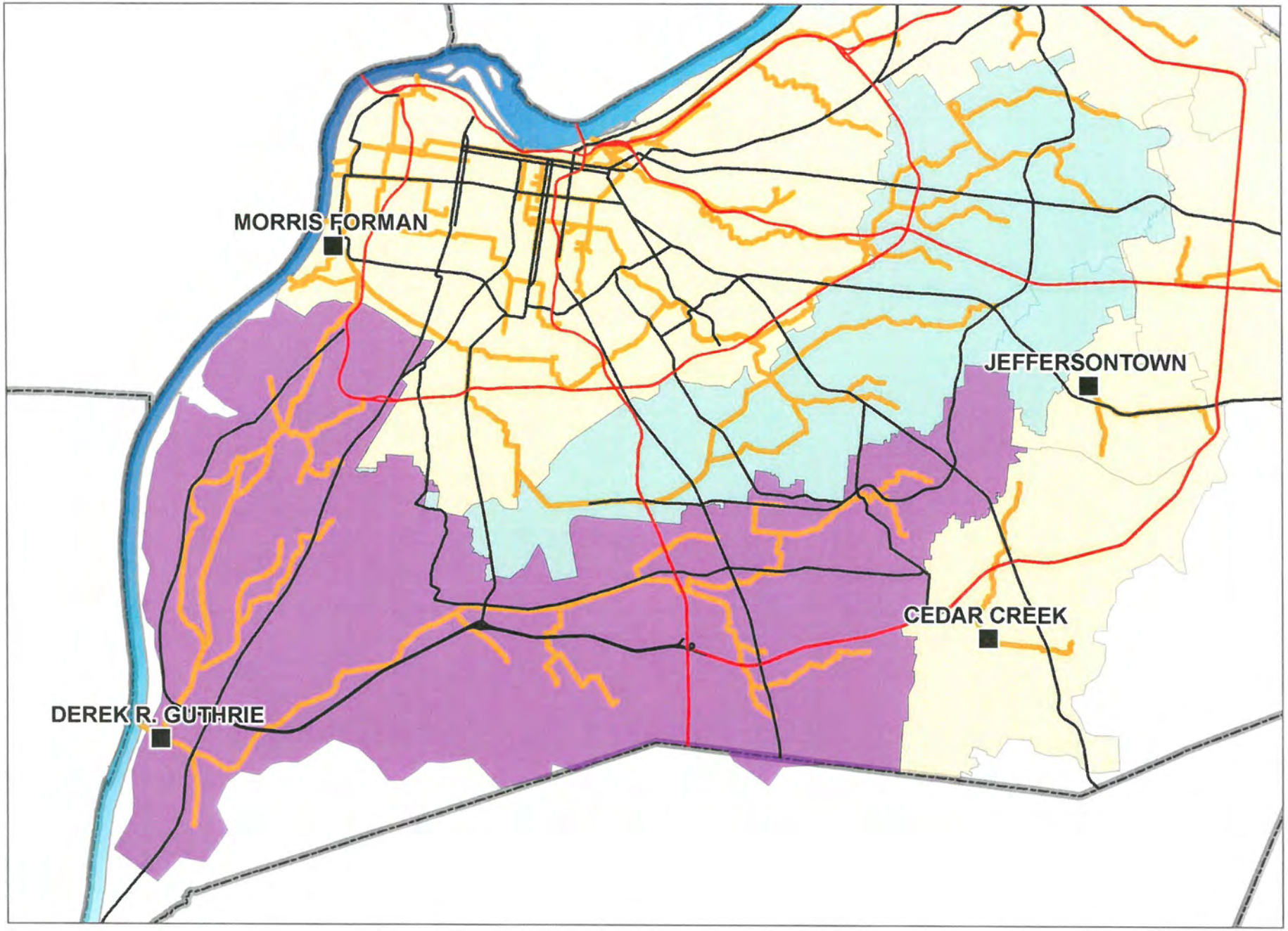
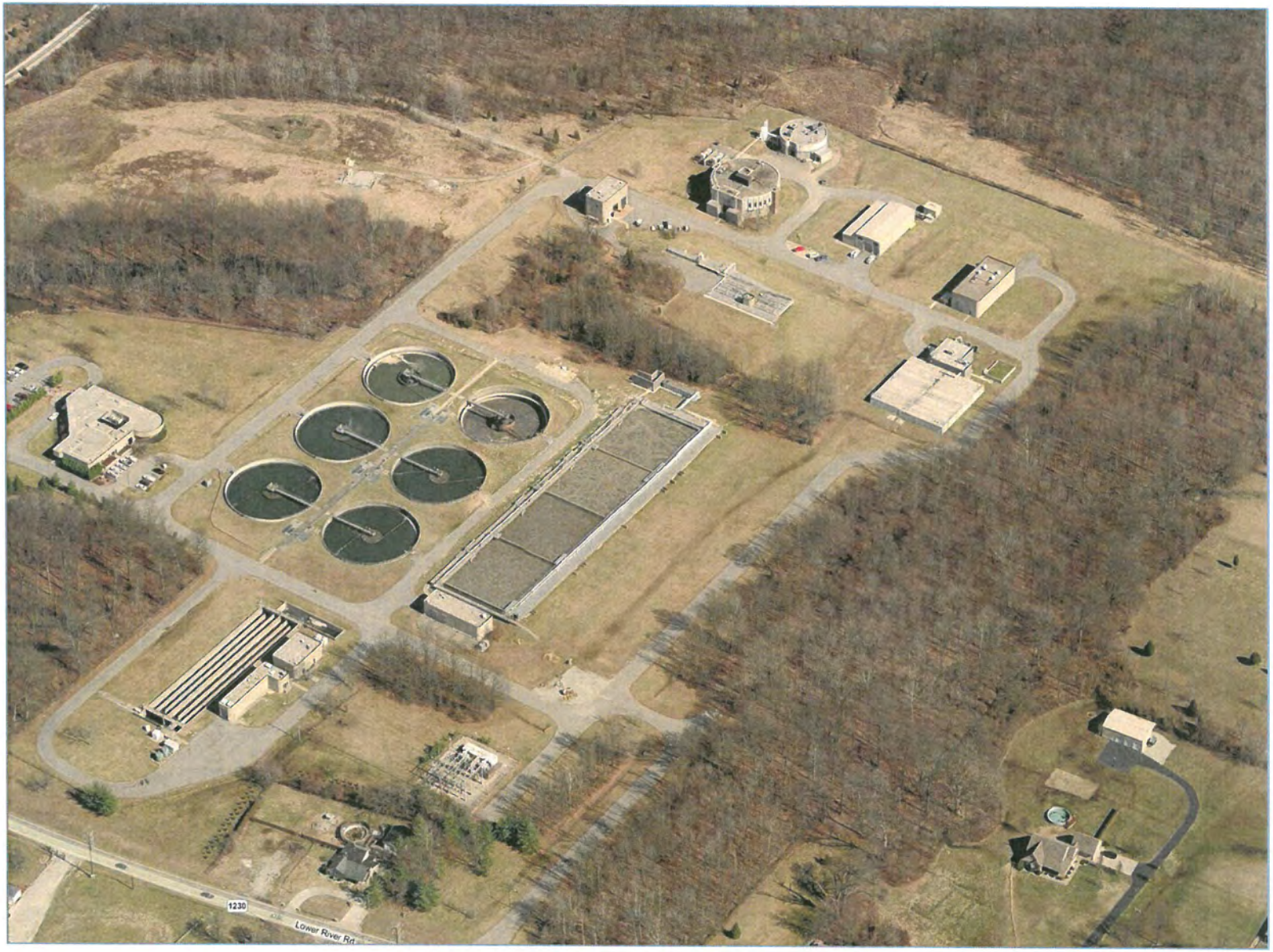
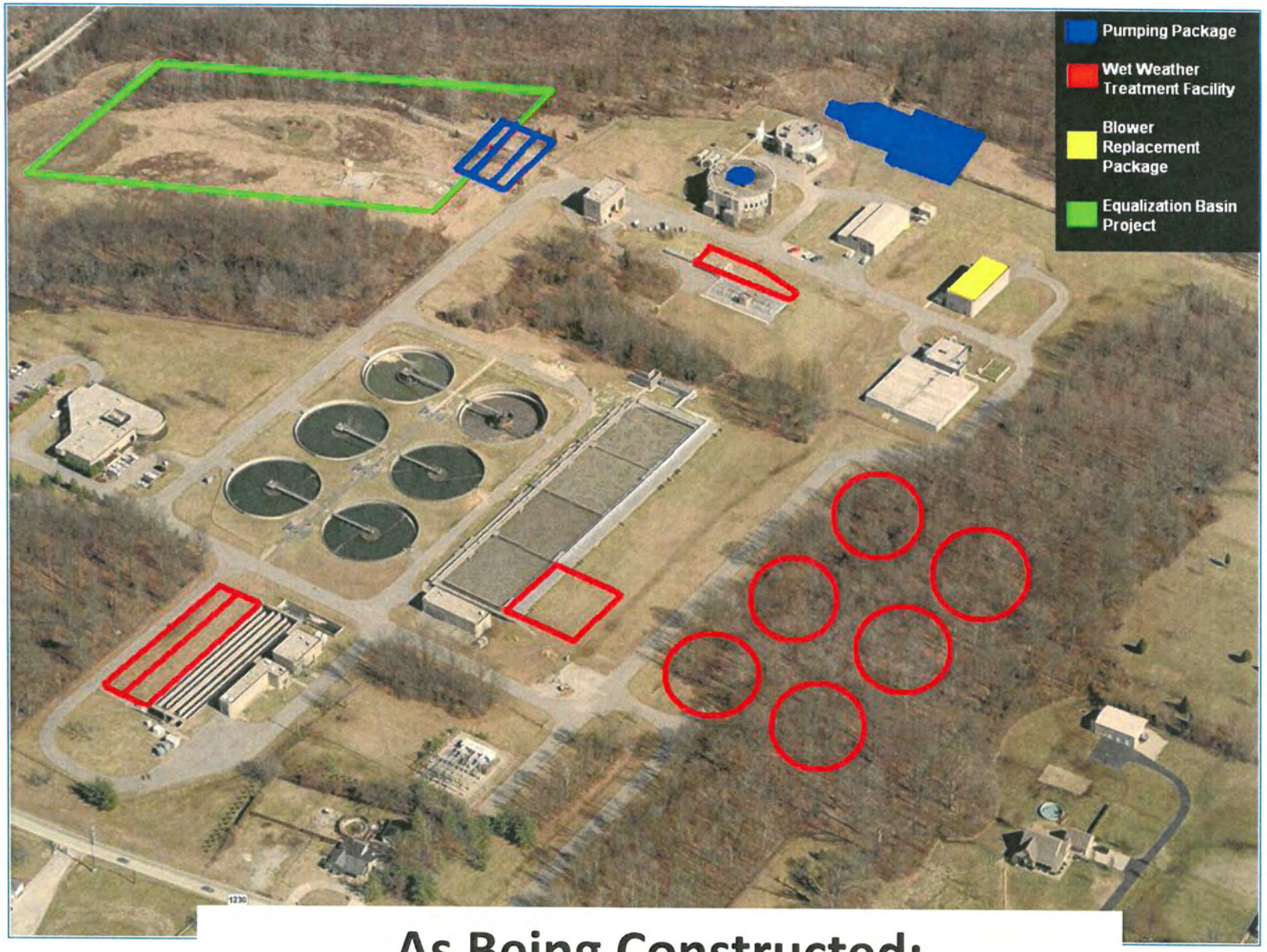

MORRIS FORMAN
JEFFERSONTOWN
CEDAR CREEK
DEREK R. GUTHRIE



Before

Design Flow Capacity:	30 MGD
Peak Flow Capacity:	100 MGD



As Being Constructed:

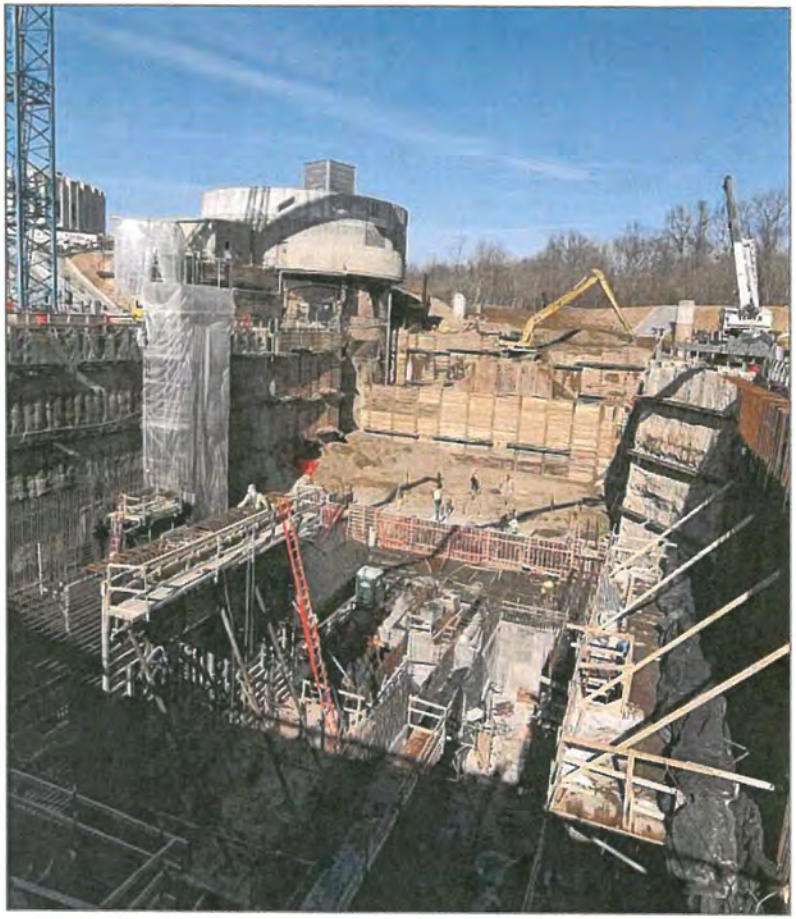
Design Flow Capacity:	30 MGD
Peak Flow Capacity:	200 MGD
Storage:	19 MG

Derek R. Guthrie Water Quality Treatment Center
Wet Weather Projects – June 2011

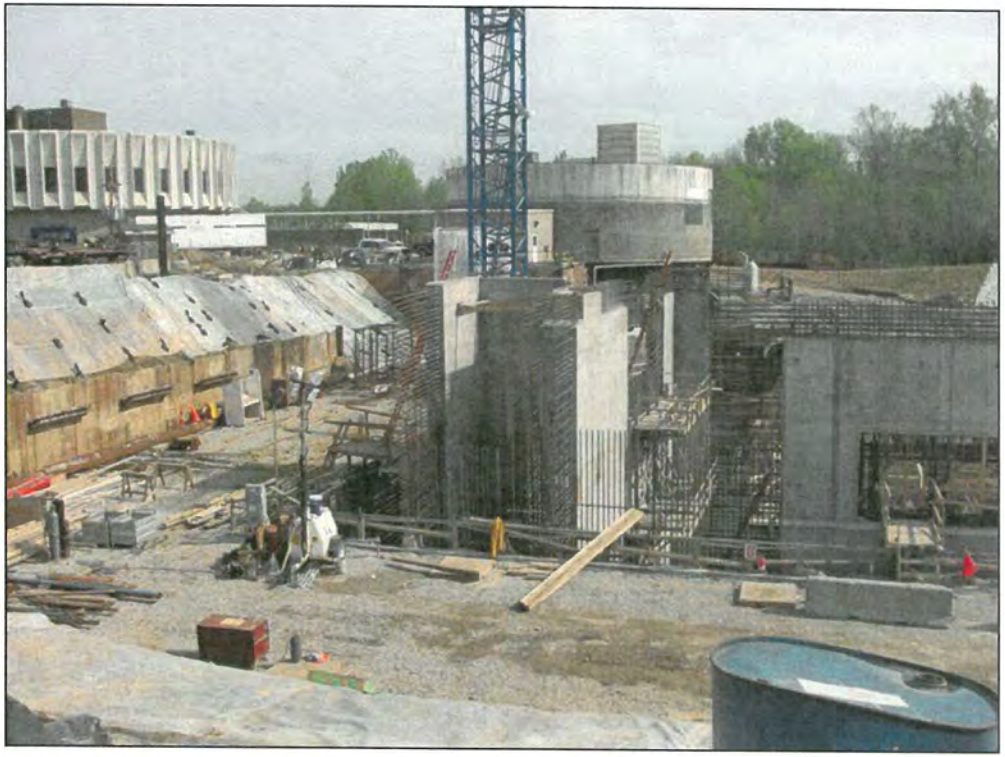
Project	Start Date	Substantial Completion	Current Contract Amount	Contractor
Pumping Package	April 28, 2010	Dec. 31, 2011	$49,355,738.55	Whittenberg Construction
Wet Weather Treatment	May 4, 2010	Dec. 31, 2011	$26,574,591.00	Dugan & Meyers
Equalization Basin	June 13, 2011	Dec. 31, 2011	$1,104,180.90	T&C Contracting
Blower Replacement	October 1, 2010	Mar. 28, 2011	$2,566,096.00	Dugan & Meyers/Turblex
Total Amount			**$79,600,606.45**	

Pumping Package Project

- Screening Facility – 3 screens at 175 MGD each
- Raw wastewater Pump Station – 8 pumps at 28.6 MGD each and 450 HP motors
- Short-term Detention Basin – 427,000 gallons of capacity



Raw wastewater PS
February 2011



May 2011

Wet Weather Treatment Facility

- Grit Chambers – two new chambers
- Aeration Basin – one new basin with 1.76 MG capacity
- Clarifiers - six new clarifiers 130 ft diameter each
- Disinfection – two new contact basins
- Power system – replace high yard equipment
- Odor control system – carbon adsorber for grit & basins

Clarifiers - May 2011

Grit chambers – May 2011

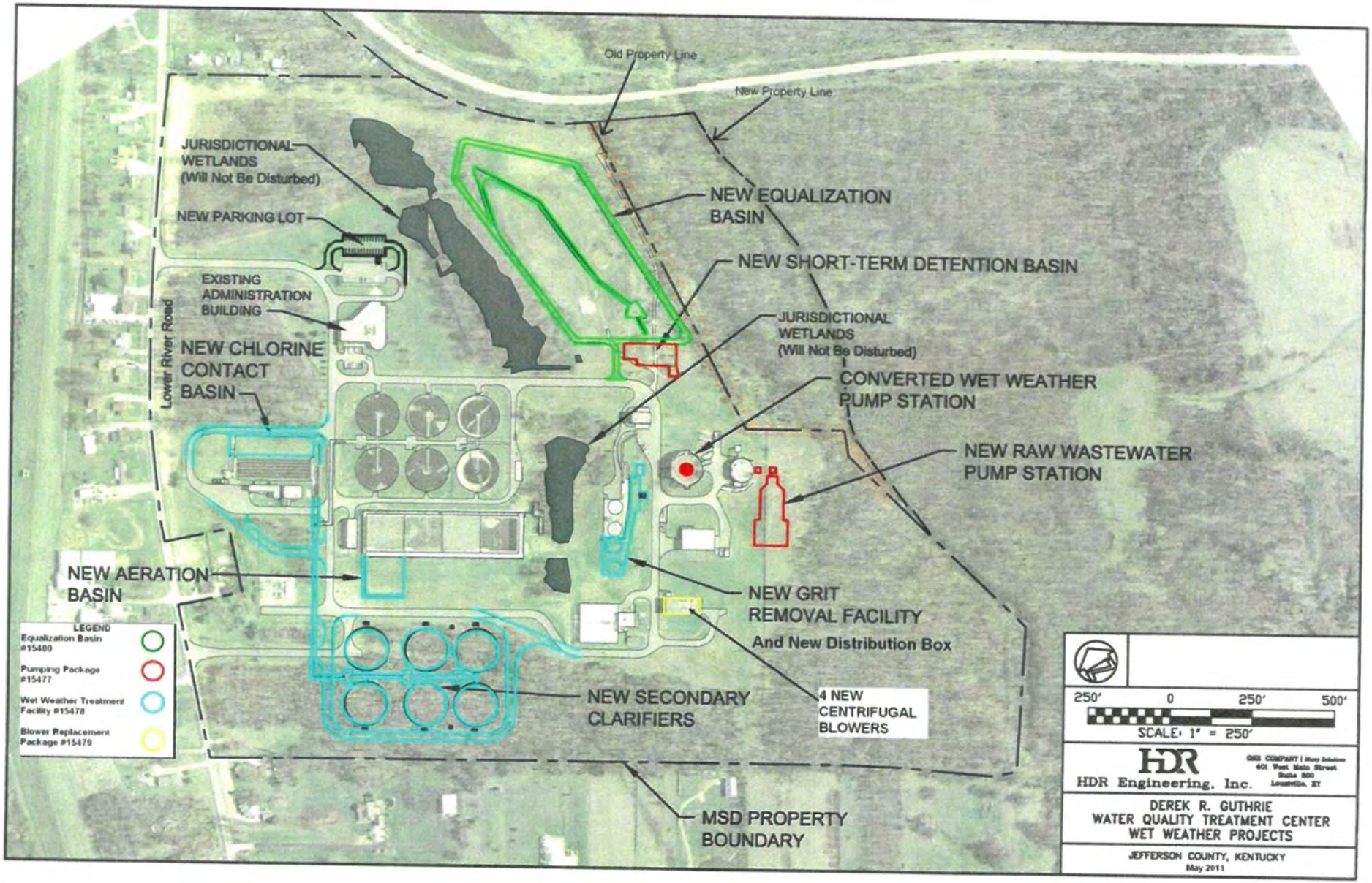
Blower Replacement Project

- Replace existing blowers with 4 new units

Each centrifugal unit 20,000 scfm at 12.5 psig.

Equalization Basin

- Construct earthen basin 19.7 MG
- Flow in from Short-term Detention Basin
- Flow out by gravity to Mill Creek Interceptor
- Dimensions: 700 ft x 315 ft x 18 ft (approx.)
- Clearing underway


Old Property Line
New Property Line
JURISDICTIONAL WETLANDS (Will Not Be Disturbed)
NEW PARKING LOT
EXISTING ADMINISTRATION BUILDING
Lower River Road
NEW CHLORINE CONTACT BASIN
NEW EQUALIZATION BASIN
NEW SHORT-TERM DETENTION BASIN
JURISDICTIONAL WETLANDS (Will Not Be Disturbed)
CONVERTED WET WEATHER PUMP STATION
NEW RAW WASTEWATER PUMP STATION
NEW AERATION BASIN
NEW GRIT REMOVAL FACILITY
And New Distribution Box
NEW SECONDARY CLARIFIERS
4 NEW CENTRIFUGAL BLOWERS
MSD PROPERTY BOUNDARY
LEGEND
Equalization Basin #15480
Pumping Package #15477
Wet Weather Treatment Facility #15478
Blower Replacement Package #15479
250' 0 250' 500'
SCALE: 1" = 250'
HDR
HDR Engineering, Inc.
401 West Main Street Suite 800 Louisville, KY
DEREK R. GUTHRIE
WATER QUALITY TREATMENT CENTER
WET WEATHER PROJECTS
JEFFERSON COUNTY, KENTUCKY
May 2011