

Sewer Overflow Abatement Plan Public Input Meeting

Meeting Topics

Sewer Overflow Abatement
Program Overview

Bells Lane High Rate
Treatment Facility Update

Southwestern Parkway
Storage Basin Project



**September
2013**

Survey of Guests

Sewer Overflow Abatement Presentation Objectives

- History of Louisville Sewers and Overflows
- Sewer Overflow Abatement Plan Overview
- Progress Report
- Working Together to Keep Sewer Rates Lower
- Three Most Frequently Asked Questions

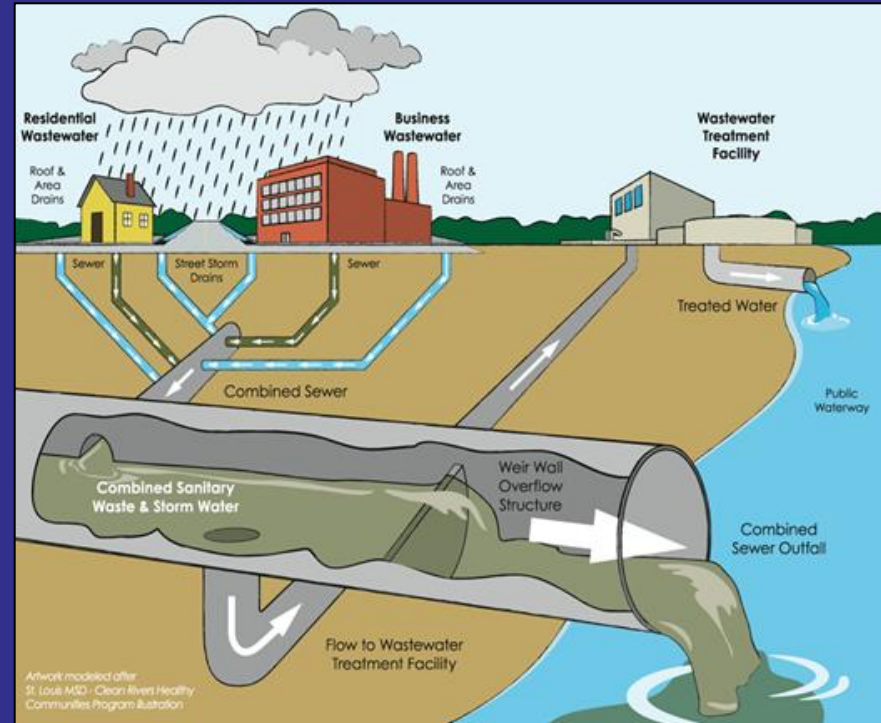
History of Louisville Sewers & Sewer Overflows

Combined Sewer Overflow

Inside I-264

Challenges

- Stormwater sewers & sanitary sewers were built to operate in “combined” pipe
- Wastewater treatment first built in 1958, but not sized for stormwater



Combined Sewer Overflows

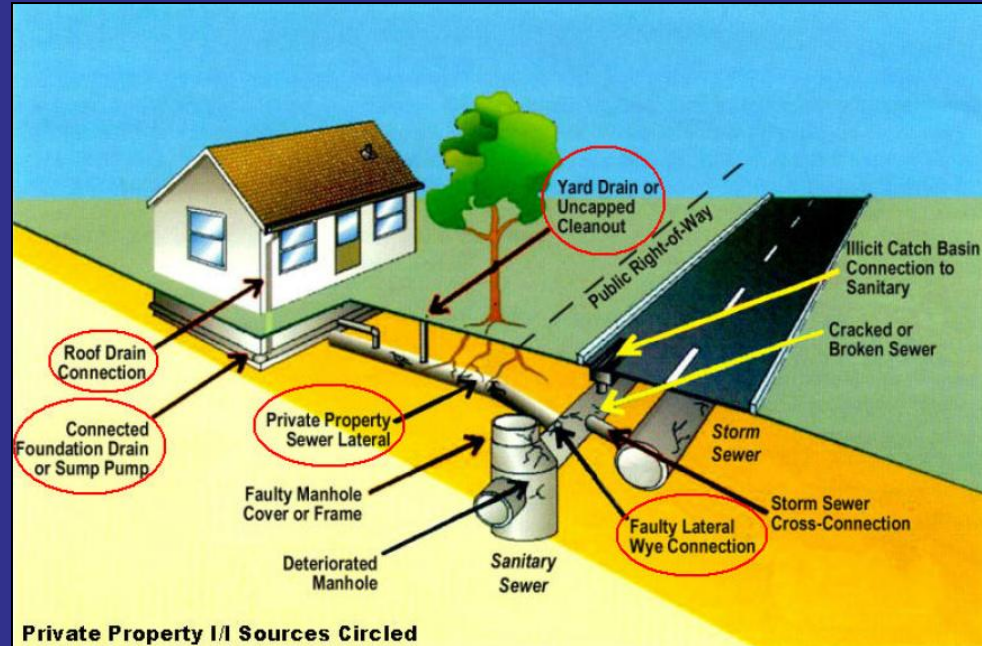


Sanitary Sewer Overflows

Along/Outside I-264

Challenges

- Original clay pipe sanitary sewers have deteriorated over time, allowing clean water entry into public system
- Groundwater sump pumps & rainwater downspouts connected to sanitary sewer from private property make up 50% of extra flow



Sanitary Sewer Overflows

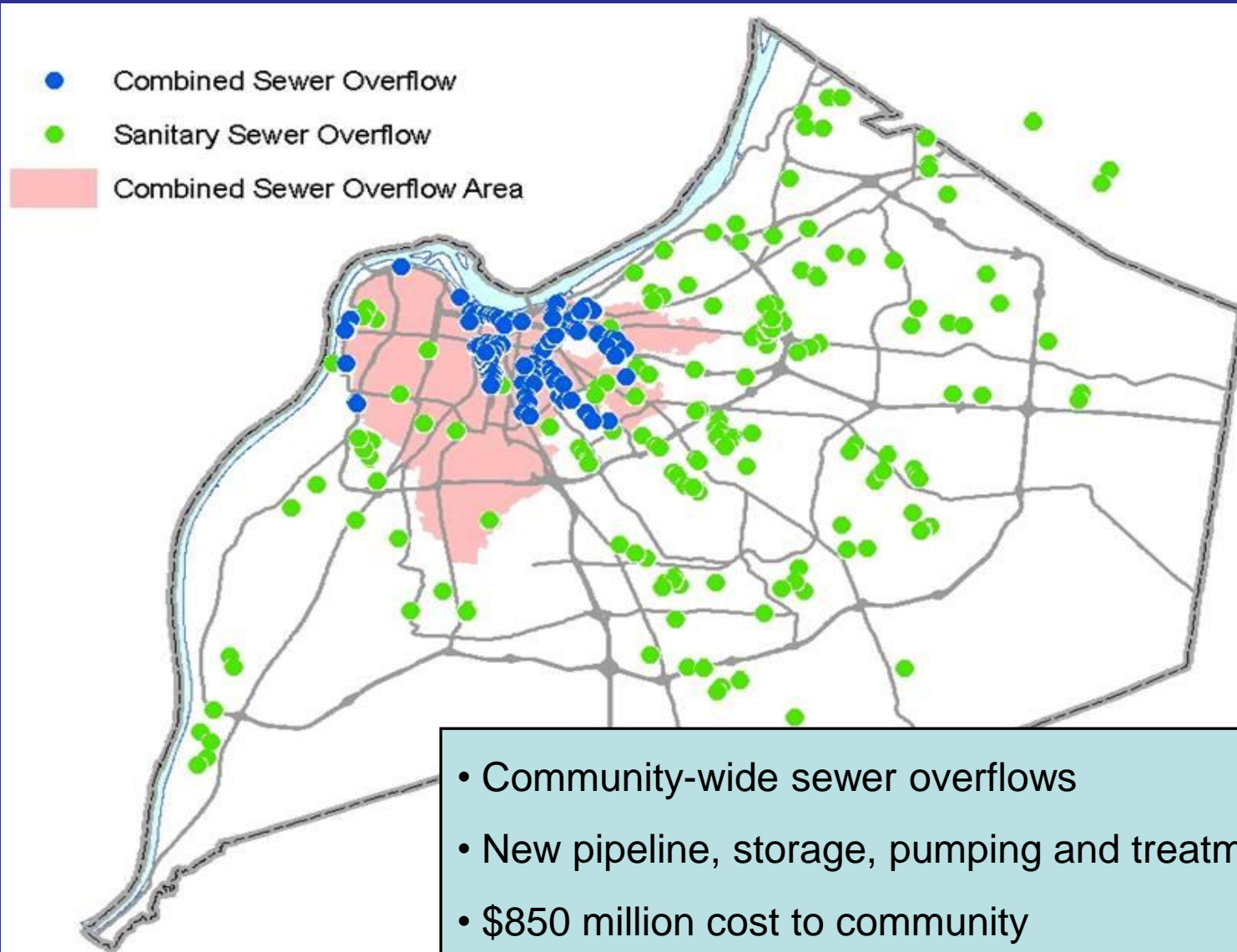


SSOs



Sewer Overflow Abatement Mandate

- **2005** – Mandate from Federal EPA and Kentucky to abate overflows
- **2008** – MSD submitted \$850 million plan to satisfy the mandate
- **2009** - Federal EPA and Kentucky approve the plan
 - Combined Sewer Overflow program complete by 2020
 - Separate Sewer Overflow program complete by 2024



Cost of Regulatory Compliance

City	Total (Cost in Billions)	System Size (Miles)	Cost per mile
Louisville	\$0.85	3,200	\$265,625
Indianapolis	\$1.20	3,000	\$400,000
Nashville	\$1.50	3,000	\$500,000
Knoxville	\$0.65	1,200	\$541,667
Sanitation District 1	\$0.88	1,600	\$550,000
St. Louis	\$4.70	6,700	\$701,493
Cincinnati	\$3.25	3,000	\$1,081,667
Atlanta	\$4.00	2,200	\$1,818,182
Cleveland	\$3.00	N/A	N/A
Columbus	\$2.50	N/A	N/A

Sewer Overflow Abatement Plan



Overflow Abatement Projects

Approved 2009 Plan

- **Gray infrastructure**
 - Pipeline projects
 - Storage basins
 - Pump station expansions
 - Wastewater treatment plant expansions
- **Source control program**
 - Green infrastructure projects for stormwater reductions
 - Rainwater downspout disconnections from sewers
 - Groundwater sump pump disconnections from sewers



Smoke testing on public sewer indicates improper downspout connection to the sanitary sewer

Implementation Progress 2007 - 2013

Gray Infrastructure Projects (78)

- 25 completed
- 26 in design/construction

Green Infrastructure Projects

- 48 completed
- 49 in design/construction

Source Control Projects

- 16 projects completed
- 13 projects in design/construction

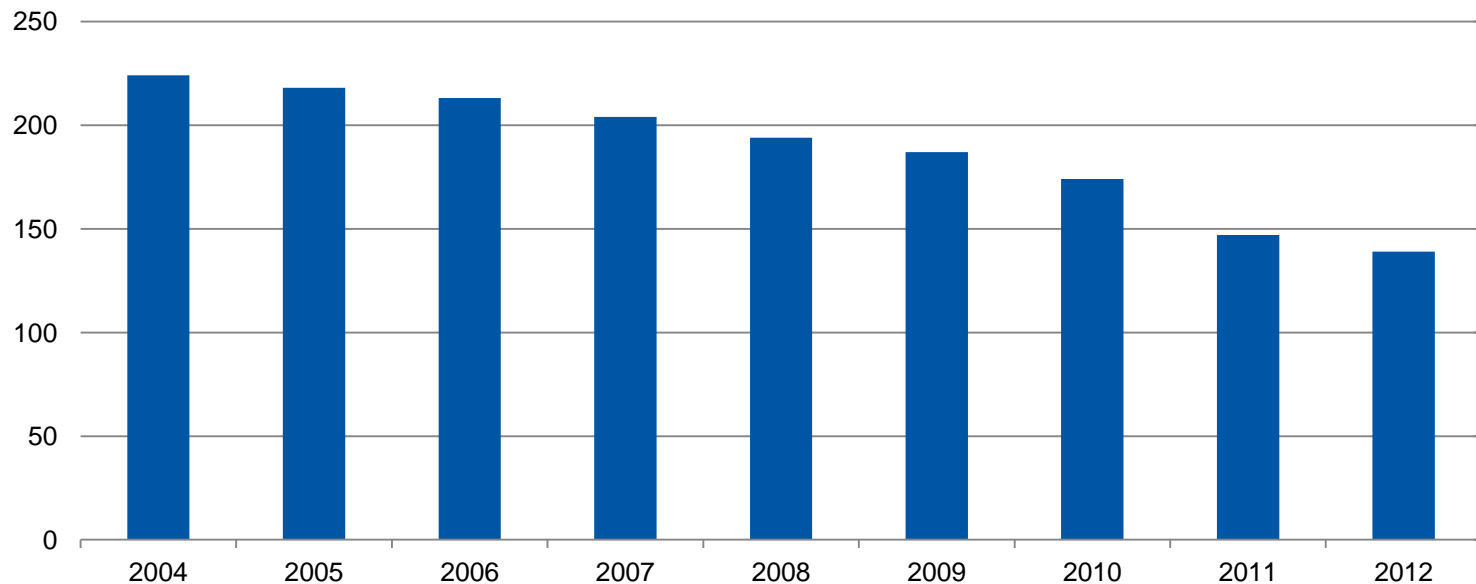
Overall Program Completion

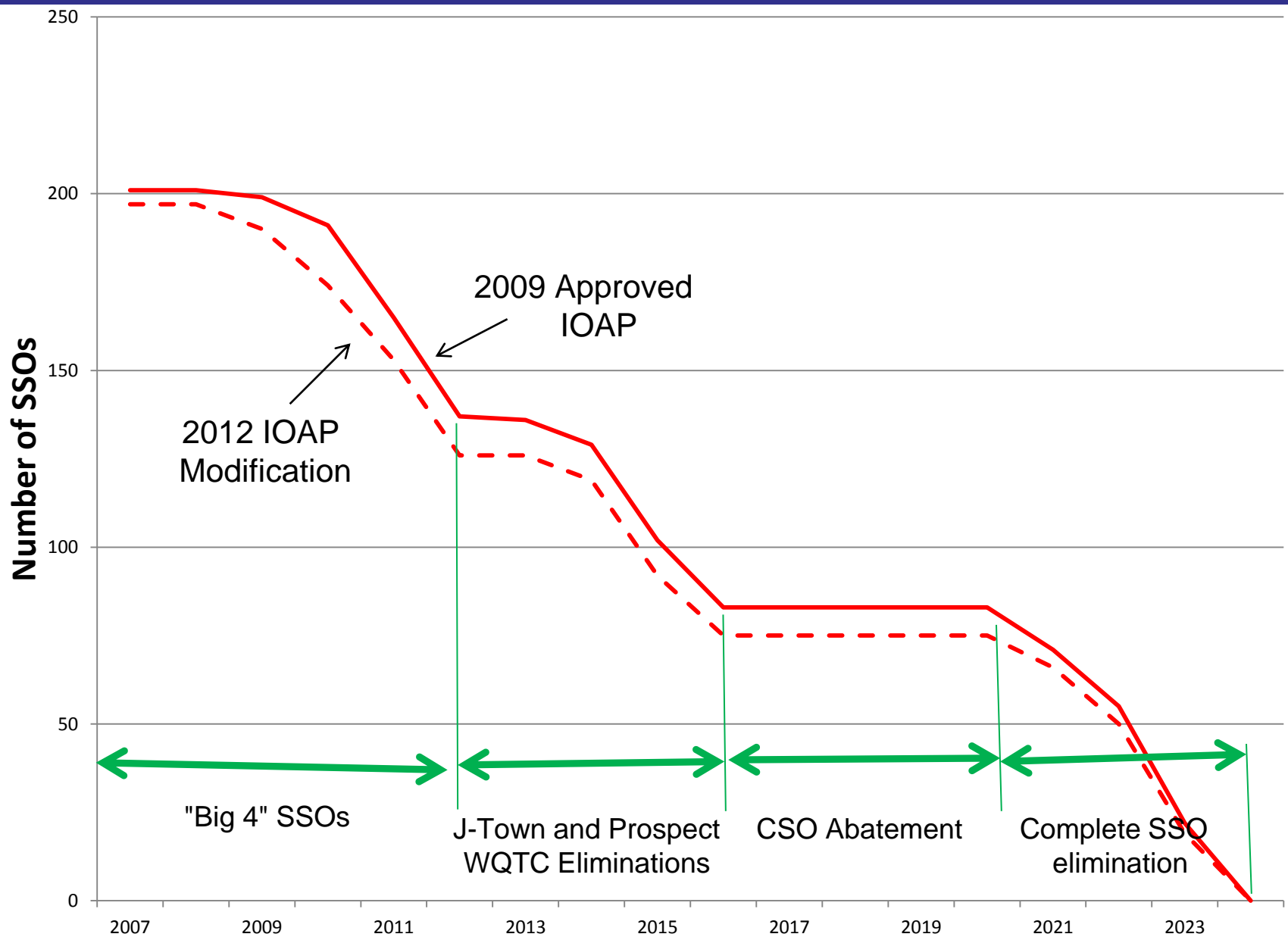
- 48% complete
- 2% under budget, compared to original estimates

Overflow Eliminations

Initial Focus on SSOs per ACD Prioritization

Remaining SSO Locations





Beechwood Village

Pumped Overflows Eliminated



Beechwood Village Pumped and Gravity Overflows SSO Volumes 2005 – 2011

- 152 SSO events
- 425 MG observed volume
- Overflow closed 09/29/2010

EMIMI010 Middle Fork of Beargrass Creek at Lexington Road Fecal Coliform GeoMean



Highgate Springs Pump Station

Pumped Overflows Eliminated



Highgate Springs Pumped Overflows SSO Volumes 2005 – 2011

- 80 SSO events
- 285 MG observed volume
- Overflow closed 11/29/2012

Hikes Lane Interceptor

Pumped Overflows Eliminated



Hikes Point Pumped Overflows SSO Volumes 2005 – 2011

- 305 SSO events
- 443 MG observed volume
- Overflow closed
11/29/2012

Derek R. Guthrie WQTC

Expansion Enables SSO Capture and Flow Diversion



Construction Progress May 2012

Southeast Diversion

Structure

SSO Volumes 2005 – 2011

- 66 SSO events
- 160 MG observed volume
- Overflow closed
12/19/2011

Sewer Overflow Abatement Plan

Proposed 2012 Modifications



Proposed Modifications

Continuous Plan Improvement!



Why a Plan Modification?

- Opportunity to improve the IOAP
 - Expanded flow monitoring
 - Updated and re-calibrated models
- Adaptive management approach specifically addressed in approved IOAP
 - EPA and KDOW have expressed support and appreciation for pro-active plan updates
 - Received preliminary approval for several necessary plan modifications

How Has Plan Been “Improved”?

- Project “right-sizing” assures continued regulatory compliance
 - No change in overall capital costs
 - Improvements in total overflow reduction
- Schedule adjustments for project right-sizing within regulatory deadlines
 - Capital spending is slower
 - Overflow reductions achieved faster

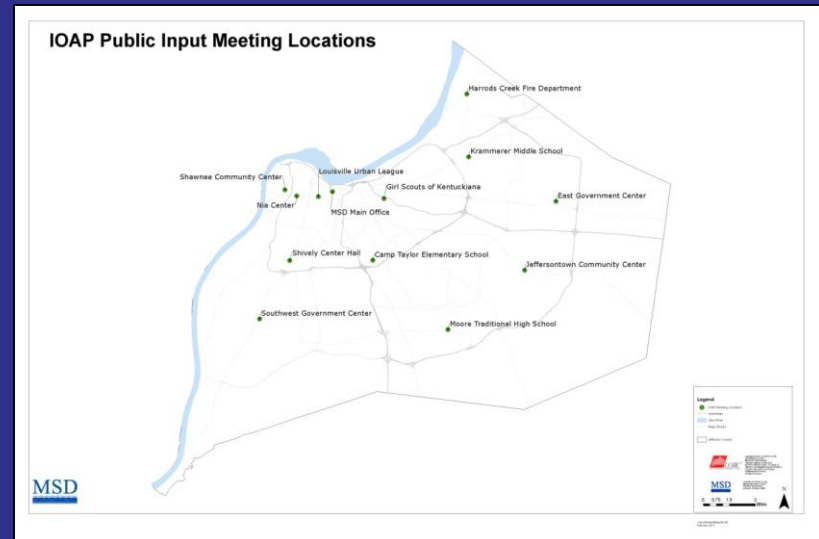
How Were Projects Impacted?

- 7 projects got larger, 7 projects got smaller
- 3 projects have higher level of overflow control, 1 project has lower control level
- 12 projects move forward in schedule
- 4 projects move back in schedule for “green” infrastructure & size increases
- Program Costs Remain at \$850 Million

How Was the Public Informed?

IOAP Project Review & Public Input Meetings

- Held 14 meetings across county since Sept 2011
- Informed on IOAP Modification benefits
- Discussed site specific implementation issues
- Formal Public Hearing held March 26, 2013



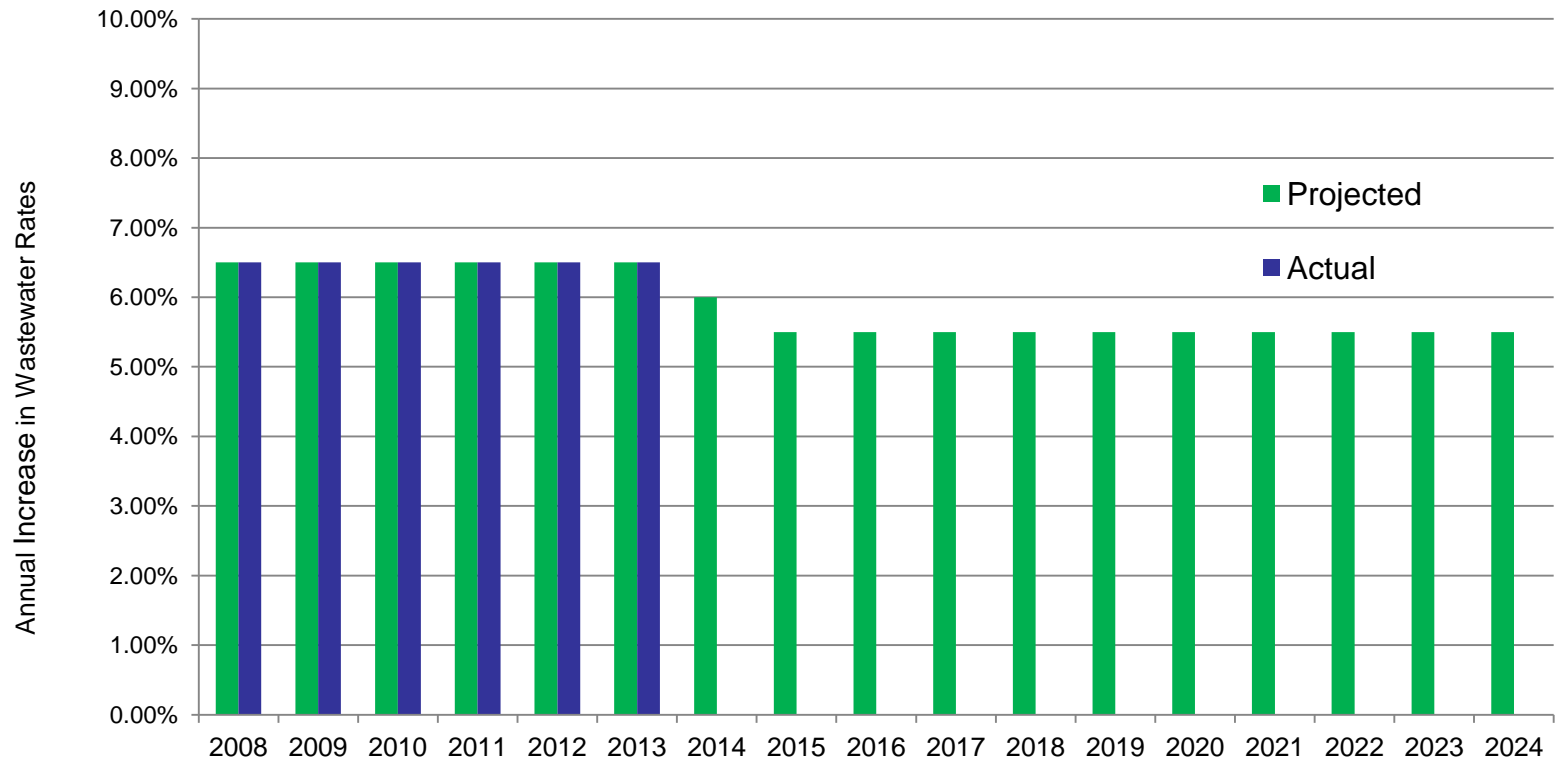
How Will Modified Plan be Approved?

MSD Board approved submittal of modified plan to the EPA and Kentucky Division of Environmental Protection on May 13, 2013

Negotiations for approval of the modified plan are underway

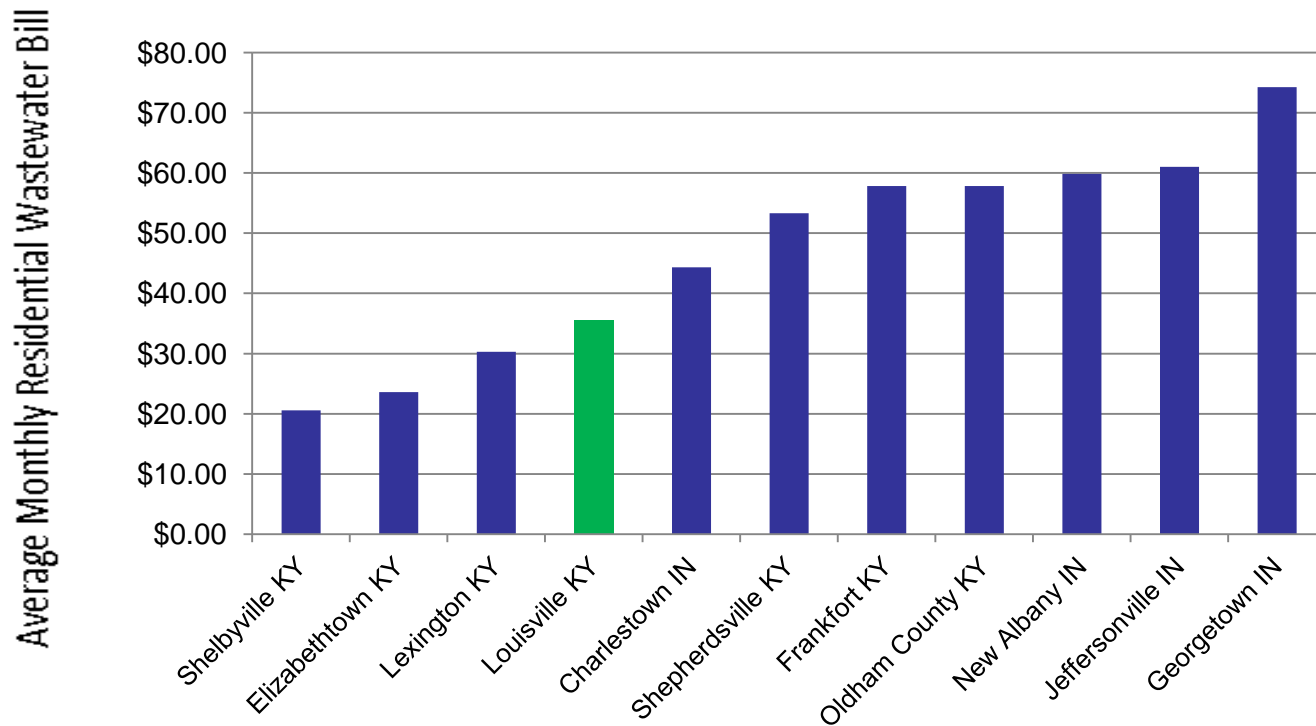
Sewer Rates

MSD's Rate Increases Compared to 2009 IOAP Projection



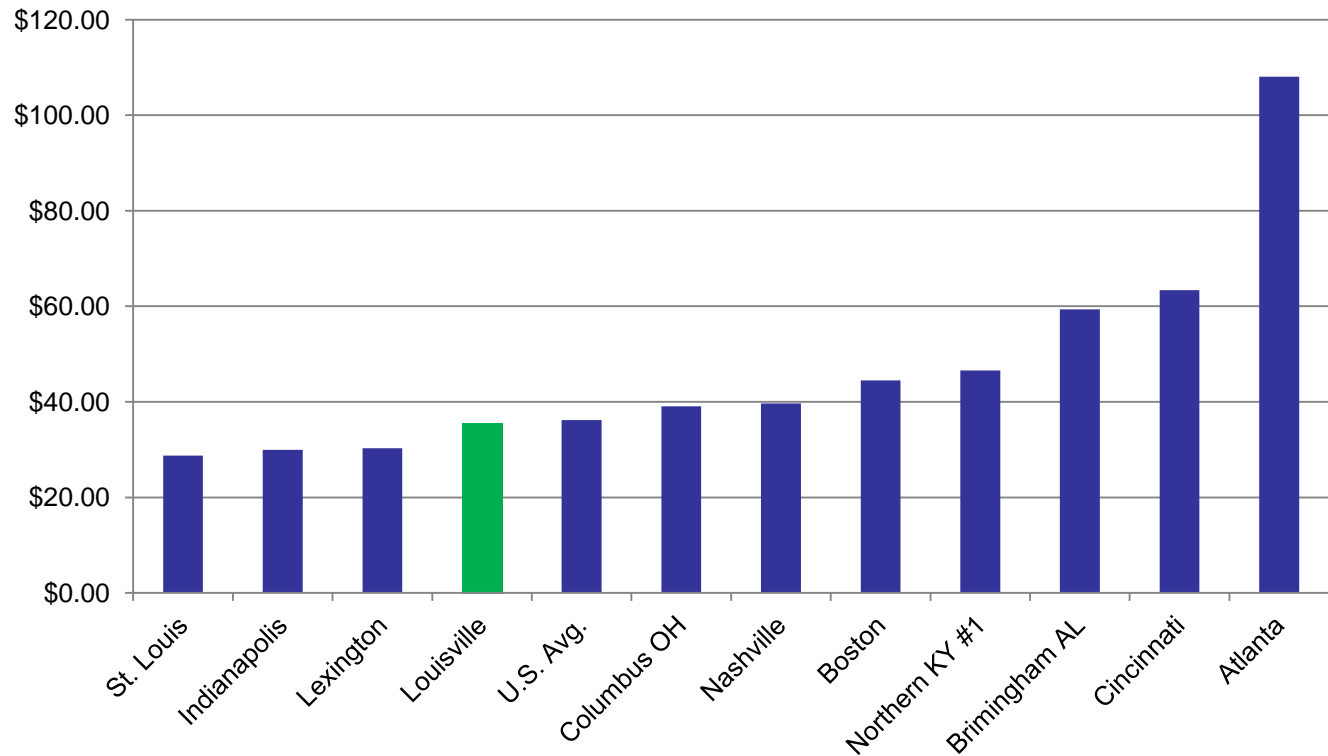
MSD's Rates

Compared to Surrounding Communities



MSD's Rates

Compared to Consent Decree Communities



MSD's Rates

Senior Citizen Discount Application

Applicability

- 65 years of age or older
- household gross income of \$35,000 or less per year
- must be on MSD sewers

Customer Relations 587-0603

MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District

SENIOR CITIZEN DISCOUNT APPLICATION
(Applicant must be 65 years of age or older with household gross income of \$35,000 or less per year and must be on MSD sewers)

Date: ____/____/____

LWC Bill Account Number: _____ (Attach copy of LWC bill)

Name of Applicant: _____ Single ☐ Married ☐ Widowed ☐

Service Address: _____ (Please print)
(Street) (City) (State) (Zip)

Resident telephone number: (____) _____ Date of Birth: ____/____/____

Please submit a document for each of the categories below and check the appropriate box:

Proof of Income	Proof of Residency	Proof of Age
<input type="checkbox"/> IRS Tax Return & Schedules*	<input type="checkbox"/> Deed/Title	<input type="checkbox"/> Drivers License
<input type="checkbox"/> Social Security Form SSA	<input type="checkbox"/> Lease/Rental Agreement	<input type="checkbox"/> Birth Certificate
<input type="checkbox"/> Other _____	<input type="checkbox"/> Property Tax Bill/PVA	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Other _____	

*Tax Return and Schedules filed within the last 12 months. Household gross income must be \$35,000 or less.

I hereby apply for a 30% Senior Citizen Discount of the amount billed for sanitary sewer service and the EPA Consent Decree Surcharge for the service address listed above. I certify that I am the legal title/lesseeholder/renter of the above property, that I am 65 years of age or older, that my household gross income is \$35,000 or less per year and that I have provided all relevant documents relating to my income, age and residency. I also understand that at MSD's discretion, I may be required to renew this application each year.

Executed this _____ day of _____, 20____

Signature of Applicant: _____

Please mail application and supporting documents to the following address:

MSD
Attn: Senior Citizen Discount Program
700 W. Liberty Street
Louisville, KY 40203

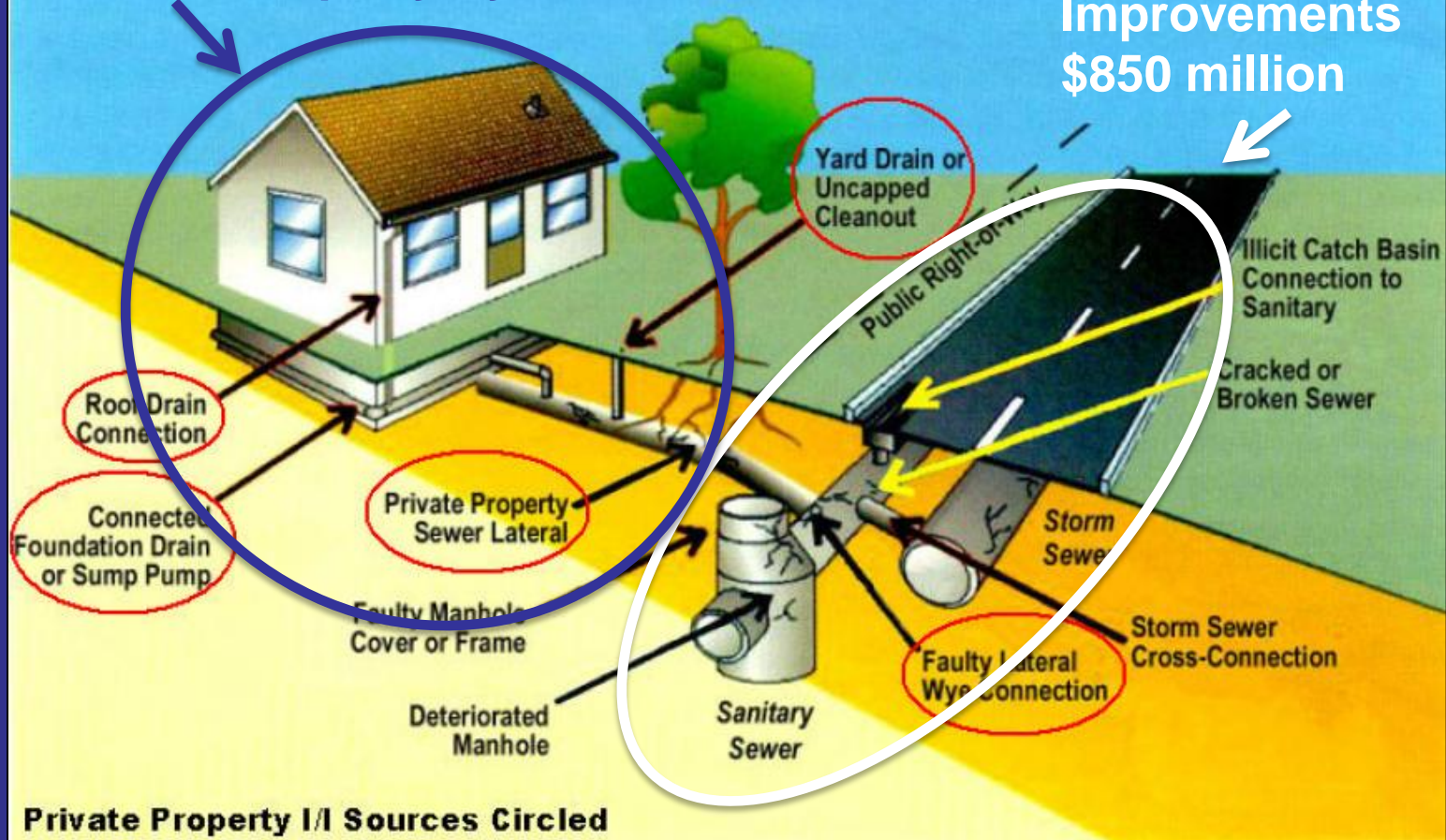
Rev. Form Date: 7/13/10

Working Together To Keep Sewer Rates Lower!!



Private Property System

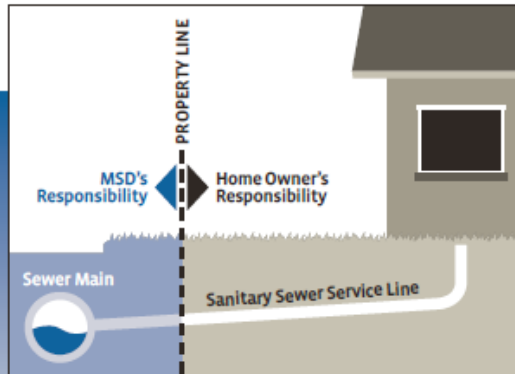
Public System
Improvements
\$850 million



Working Together To Keep Sewer Rates Lower!!



**MSD Sanitary
Sewer Line
Replacement
Program
587-0603**



Clay pipes can crack
and/or separate.

New PVC pipe is more
efficient and durable.



Working Together To Keep Sewer Rates Lower!!

- Turn downspouts onto the ground
- Capture rain from down spouts to use for watering your gardens and landscaping
 - Rain barrels
 - Rain gardens



Working Together To Keep Sewer Rates Lower!!

Disconnect sump pumps
from the sewer system

- Single biggest source of private-side unauthorized connections
- Should outlet to the ground or stormwater system

**Plumbing Modification
Program 587-0603**



Working Together To Keep Sewer Rates Lower!!

Delay using
dishwashers and
washing machines
until after rain
events have
passed

Sewers are FULL!



Working Together To Keep Sewer Rates Lower!!



TRASH it – don't FLUSH it!

dental floss, hair, diaper wipes,
wet wipes, “flushable” wipes



**accumulates at pumps and
causes sewer overflows and
basement backups**

What You Can Do To Help Keep Sewer Rates Lower!!

Put fats, oils & greases
in the trash

NOT down the drain!!!!

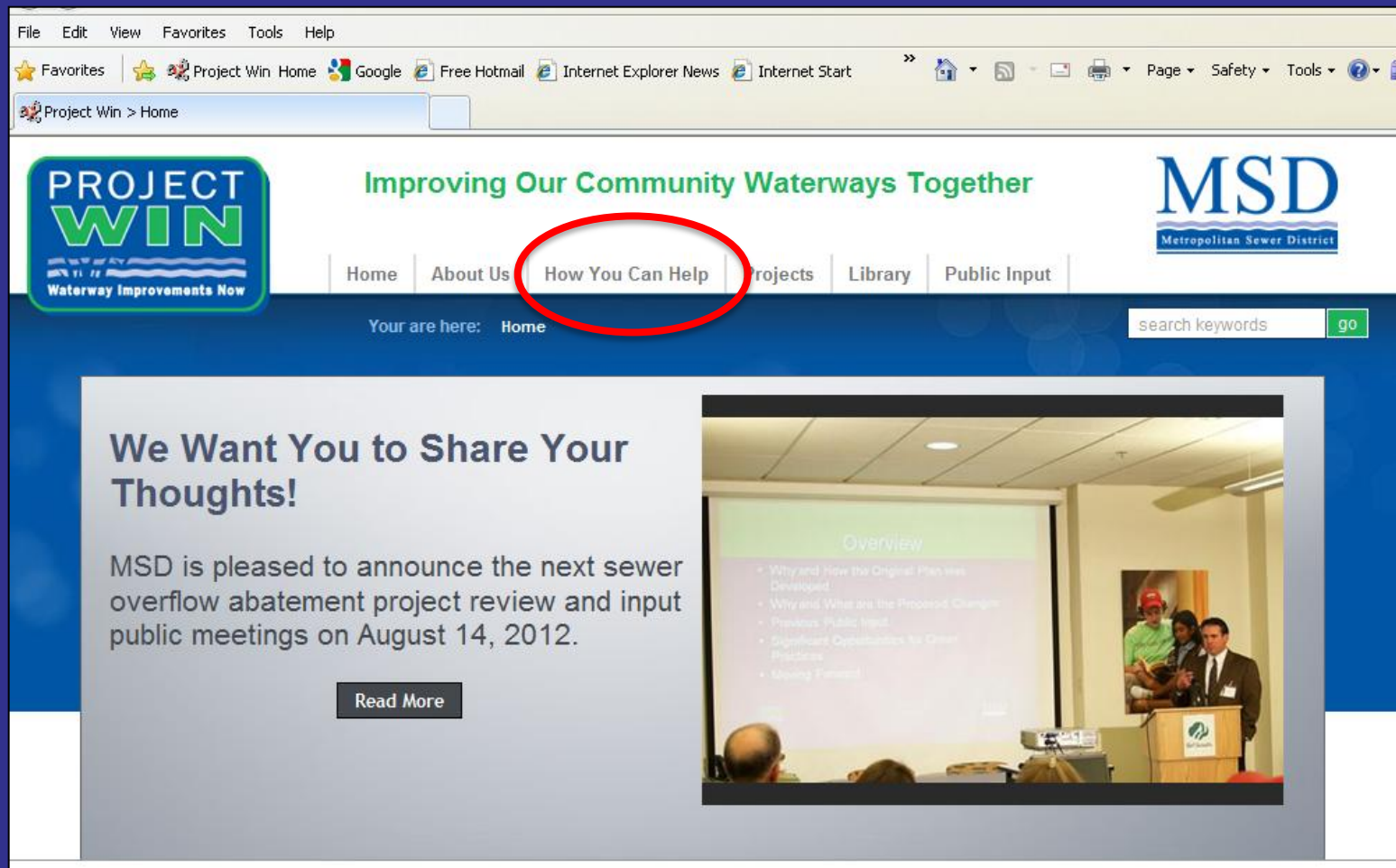


Grease accumulates in pipes



**Put hot grease in metal
container, let cool,
TRASH!**

Project WIN Website - msdprojectwin.org



The screenshot shows the Project WIN website homepage. The browser window at the top displays the address bar with "Project Win > Home" and the title bar with "Project Win Home". The website header features the "PROJECT WIN" logo on the left, the tagline "Improving Our Community Waterways Together" in the center, and the "MSD Metropolitan Sewer District" logo on the right. A navigation menu below the header includes links for "Home", "About Us", "How You Can Help" (which is circled in red), "Projects", "Library", and "Public Input". Below the navigation menu, a breadcrumb trail reads "Your are here: Home". A search bar on the right side of the header contains the text "search keywords" and a "go" button. The main content area has a blue background. On the left, a white box contains the heading "We Want You to Share Your Thoughts!" followed by the text "MSD is pleased to announce the next sewer overflow abatement project review and input public meetings on August 14, 2012." and a "Read More" button. On the right, a photograph shows a presentation in progress. A man in a suit is speaking at a podium, and a woman in a green shirt is standing next to him. A large screen in the background displays a presentation titled "Overview" with a bulleted list of topics.

File Edit View Favorites Tools Help

★ Favorites ★ Project Win Home Google Free Hotmail Internet Explorer News Internet Start

Project Win > Home

PROJECT WIN
Waterway Improvements Now

Improving Our Community Waterways Together

MSD
Metropolitan Sewer District

Home About Us **How You Can Help** Projects Library Public Input

Your are here: Home

search keywords go

We Want You to Share Your Thoughts!


MSD is pleased to announce the next sewer overflow abatement project review and input public meetings on August 14, 2012.

[Read More](#)


Overview


- Why and How the Original Plan was Developed
- Why and What are the Proposed Changes
- Previous Public Input
- Significant Obstacles to Green Practices
- Moving Forward


Project WIN Website - msdprojectwin.org

**Public Notices**


Current Weather

 H 81°
L 57°

Jeffersontown Blending 

Overflow Advisory Level 

**SIGN UP FOR
ALERTS & NOTIFICATIONS**

**Upcoming Events**


5/8/2012 - Wet Weather Team Stakeholder Group

5/10/2012 - IOAP Public Input Meeting at the NIA Center

5/15/2012 - IOAP Public Input Meeting at the Jeffersontown Community Center

5/17/2012 - IOAP Public Input Meeting at the Harrods Creek Fire Department

[More Events](#)

**Links**

[BROCHURES](#)

[FACT SHEETS](#)

[FAQ](#)

[INTERACTIVE MAP](#)


[JUST FOR KIDS](#)


[QUARTERLY REPORT](#)


[PRESS & NEWS](#)


[CHECK LOCAL RAINFALL](#)


[CSO/SSO LOCATIONS](#)

**Contact Us**

**PHONE**
(502) 587-0603

**EMAIL**
ProjectWINInfo@LouisvilleMSD.org

**JUST FOR KIDS**

**View us on
YouTube.
[click here](#)**

© 2012 Louisville and Jefferson County Metropolitan Sewer District

[Home](#) [About Us](#) [How You Can Help](#) [Projects](#) [Library](#) [Public Input](#) [Contact Us](#)

Frequently Asked Questions



Frequent Question #1

- Why are you doing \$850M worth of sewer work? Is it really necessary?
- Why are you charging customers more money while we are in a recession?

Unfunded Federal Mandate

Control combined sewer overflows by 2020
Eliminate sanitary sewer overflows by 2024

Frequent Question #2

- Why is this the first we've heard about this large work effort?

MSD held 22 public meetings
in 2007/2008 prior to
submitting the plan to
regulators for approval

Please Complete the Customer Survey



Frequent Question #3

Will my input matter?

Depending on project status,
public input can impact

- Final project location
- Site design to minimize neighborhood impact
- Project appearance

Public Input

Sewer Overflow Abatement Program/Projects

4 Ways to provide comments and ask questions

- Note card or comment form
- Information station
- Via email at commentsIOAP@msdlouky.org
- Via mail:

MSD IOAP Project Comments

Attention: Project WIN Program Manager

700 West Liberty St.

Louisville, KY 40203

