Sewer Overflow Abatement Plan Public Input Meeting

Meeting Topics

Sewer Overflow Abatement Program Overview

Sewer Overflow Abatement Projects Overview

November 2012







Introductions

- Special guests
- MSD Directors
- MSD Community Relations Administrator
- MSD Customer Relations Staff
- MSD Project WIN & Engineering Staff





SEWER OVERFLOWS





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





Presentation Objectives

- Three most frequently asked questions
- Sewer Overflow Abatement Plan Overview
- Progress report
- Proposed Plan Modifications
- How you can help keep sewer rates lower
- Public input request





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?

Must Adhere to Federal Mandate

Depending on project status, public input can impact

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





Sewer Overflow Abatement Plan







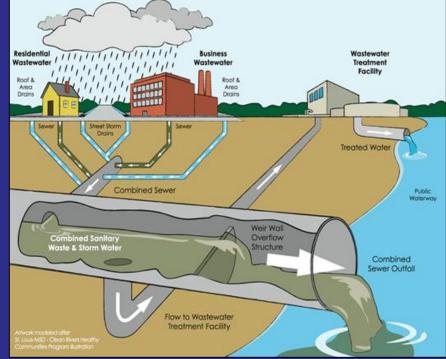
Combined Sewer Overflows



Combined Sewer Overflow

Challenges

- Stormwater sewers & sanitary sewers were built to operate in "combined" pipe
- Wastewater treatment not sized for stormwater
- Groundwater sump pumps & rainwater downspouts connected to sanitary sewer from private property







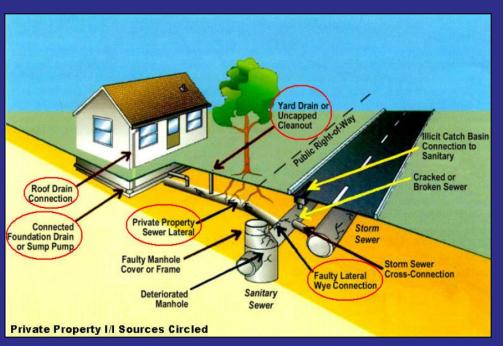
Sanitary Sewer Overflows



Sanitary Sewer Overflows

Challenges

- 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



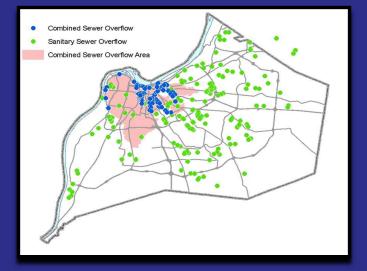




2005 Federal Consent Decree Amended in 2009

On CSOs

- CSOs allowed in wet weather; must not cause or contribute to stream water quality impairment
- CSOs in dry weather prohibited
- Complete program by 2020

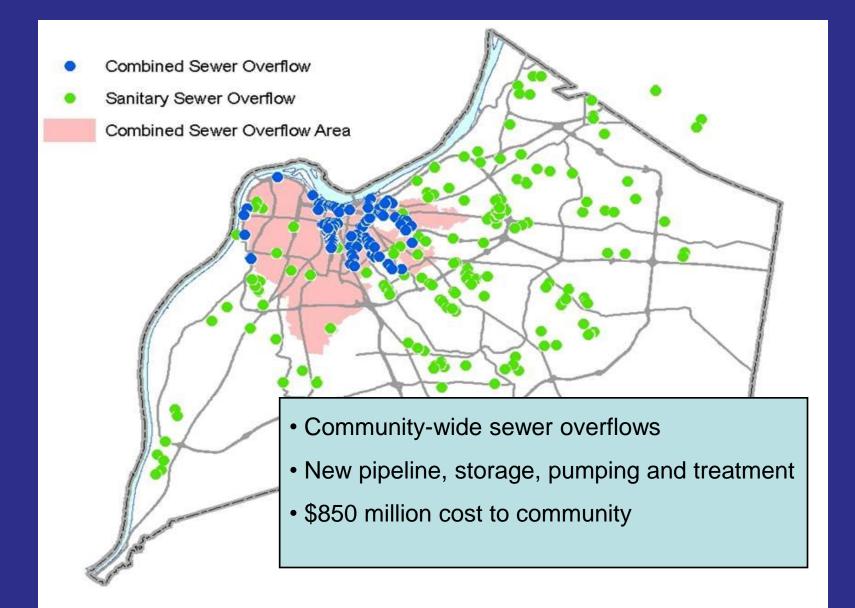


On SSOs

- SSOs in dry & wet weather prohibited
- Complete program by 2024







CSO Projects Approved 2009 Plan

Gray Infrastructure Projects

- Sewer separations & modifications
- Storage basins
- Replacement and expansion of Nightingale Pump Station
- 1 High-Rate Wet Weather Treatment Facility

Source Control Program

- Green infrastructure projects for stormwater reductions
- Flood pump station modifications for dry weather overflows





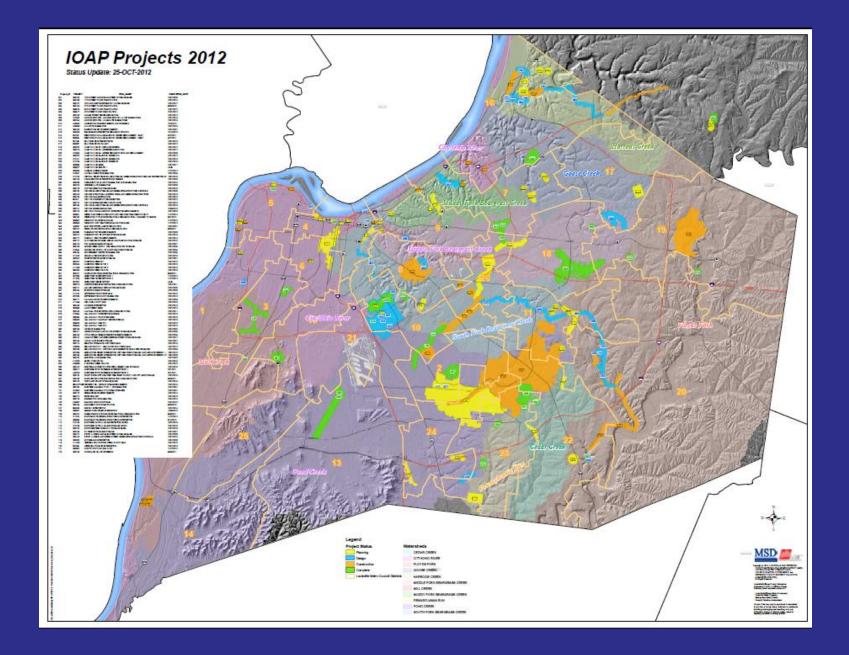
SSO Projects Approved 2009 Plan

Gray infrastructure

- Conveyance pipeline projects
- Storage basins
- Pump station upgrades or expansions
- 1 Wastewater treatment expansion
- Source control program
 - Rainwater downspouts
 - Groundwater sump pumps

Smoke testing on public sewer indicates improper downspout connection





Implementation Progress 2007 - 2012

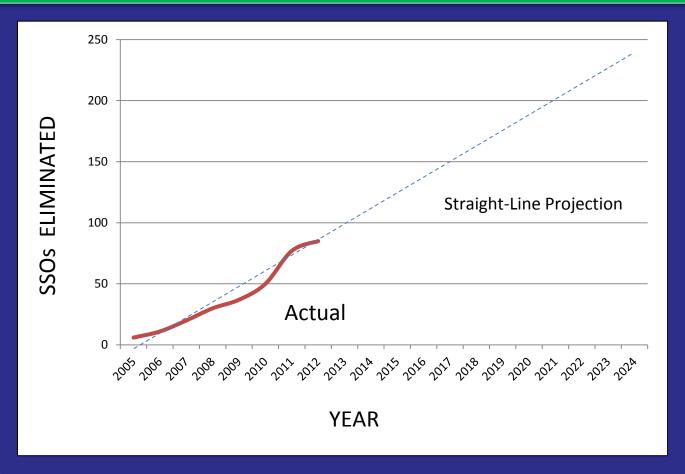
- Gray Infrastructure
 Projects
 - 25% completed
 - 20% in design or construction
- Green Infrastructure
 Projects
 - 25 completed
 - 40 in design or construction
 - 30% of program budget committed

- I/I Reduction Projects
 - 9 rehab/replacement projects completed
 - 8 rehab/replacement projects in design or construction
- Overall program
 - About 25% complete
 - About 5% under budget, compared to original IOAP estimates





Implementation Progress First Five Years







Proposed Modifications



Proposed Modifications

Approved 2009 Plan Provided for Adjustments

- Improve system monitoring and modeling
- Review project approaches & sizing
- Right-size projects to ensure overflow plan objectives met





Proposed Modification

- Program Costs Remain at \$850 Million
- Some projects grew significantly in size and cost, or are new projects
- Some projects shrank, or were eliminated
- Overall program benefits increased
- Project schedule revisions necessary





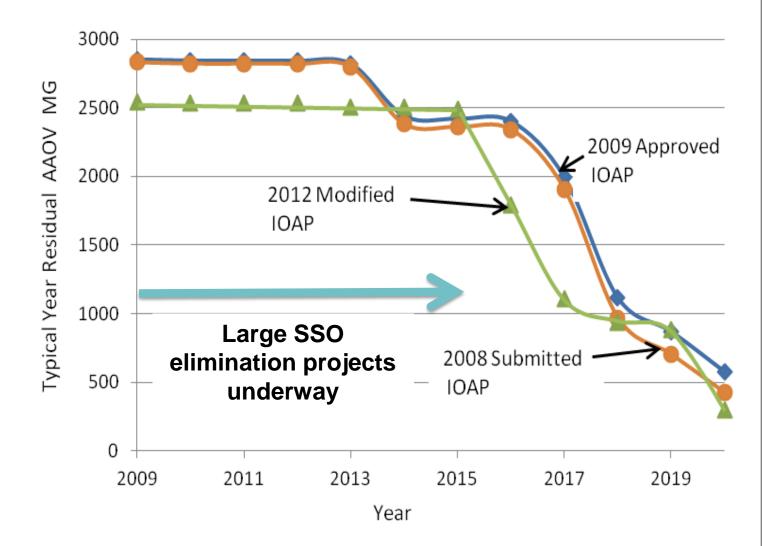
Project Modifications Summary

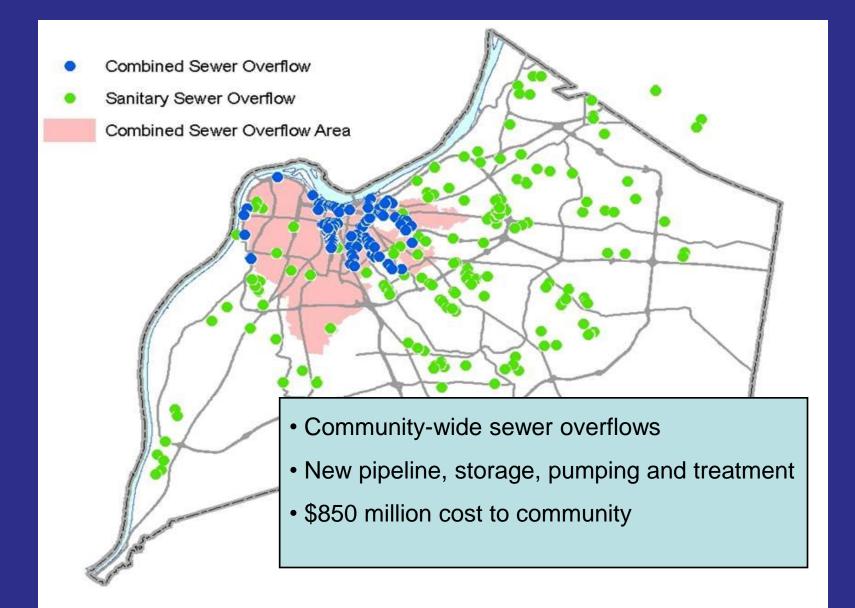
- 7 projects got larger
- 7 projects got smaller
- 3 projects have higher level of overflow control, 1 project has lower control level
- 12 projects move forward in schedule some split from other projects
- 4 projects move back in schedule for "green"
 & size increases

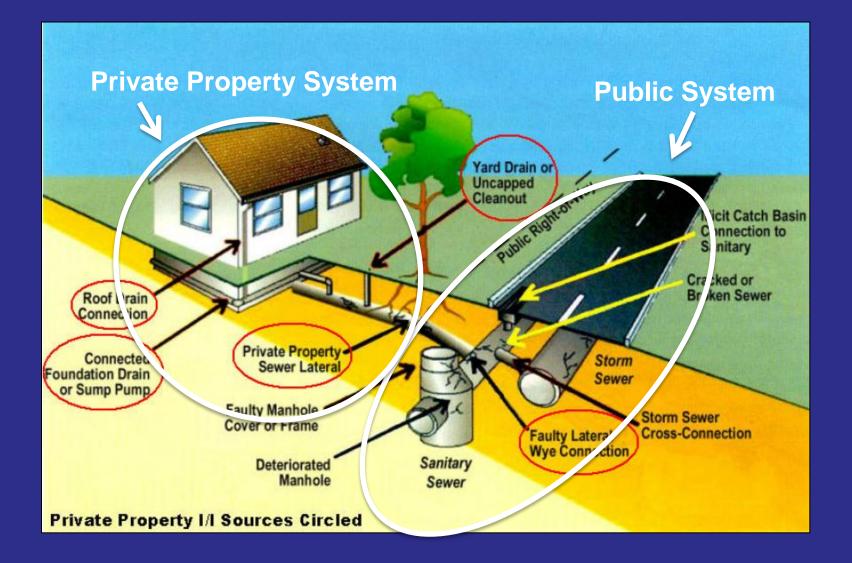




CSO Annual Average Overflow Volume (AAOV) Reduction







Fix private sewer laterals

- Notified by MSD
- Basement backups caused by roots
- Notified by Plumber

Sanitary Sewer Line Replacement Program 587-0603







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







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







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

Sewers are FULL!



Put dental floss, hair, and rags in the trash NOT down the toilet!





accumulates at pumps and causes sewer overflows

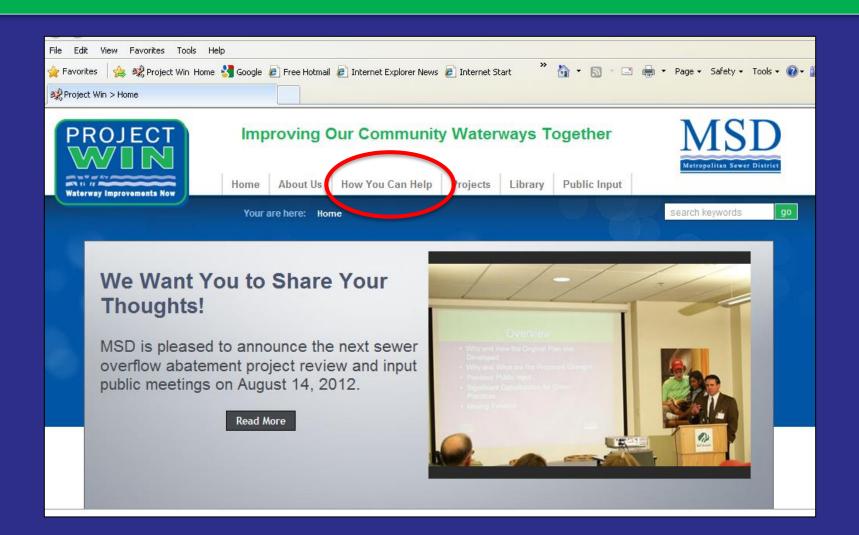
Put fats, oils & greases in the trash NOT down the drain!!!!

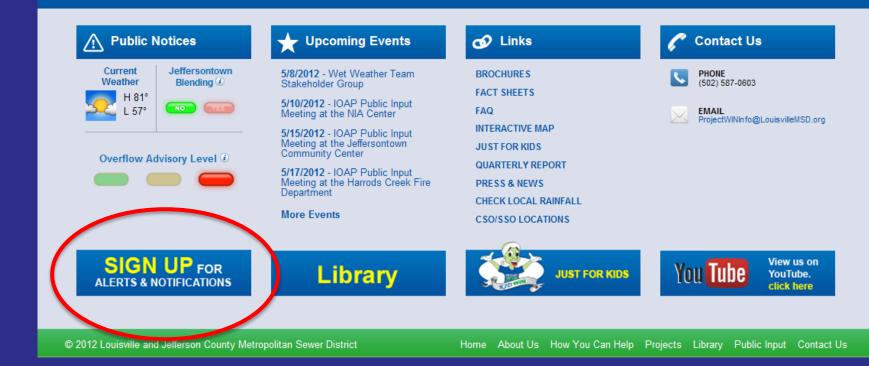


Grease accumulates in pipes

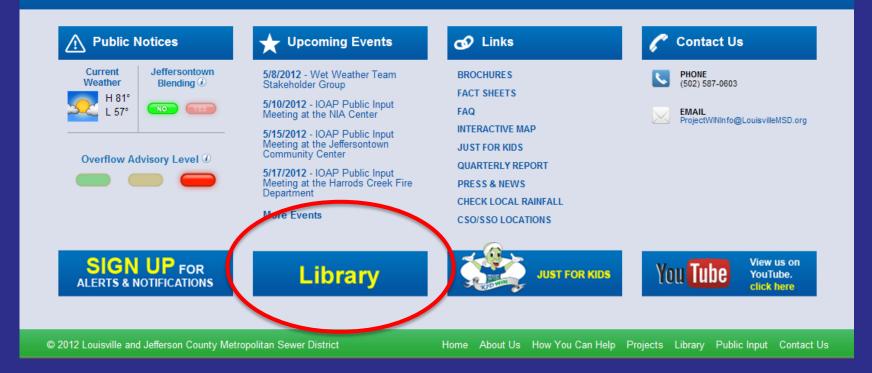


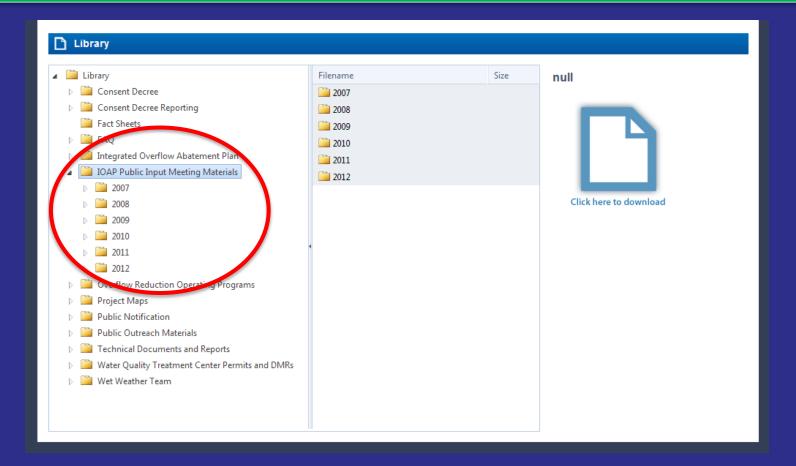
Put hot grease in metal container, let cool, TRASH!





Plan (IOAP) . read more





Moving Forward

- Continue discussions with EPA regarding proposed project modifications
- Additional public input meetings in January 2013
- Red-line markups of IOAP available at Public Libraries in February 2013





We Want to Hear from You

Drainage/sewer concerns at your property

- Stormwater drainage concerns on your property or nearby property
- Wastewater/sewer concerns on your property or nearby property

Please see Customer Relations/IF&P staff





We Want to Hear from You

General MSD Concerns

Please see MSD's Community Relations Administrator and MSD Directors





Public Input Sought Sewer Overflow Abatement Program/Projects

Provide comments by November 29, 2012

- Tonight on the comment form
- Tonight on the video
- Via email at <u>commentsIOAP@msdlouky.org</u>
- Via mail:

MSD IOAP Project Comments Attention: Project WIN Program Manager 700 West Liberty St. Louisville, KY 40203



